

Queen Elizabeth Hospital
Aden

Architects : Harrison Barnes and Hubbard
Consulting Engineers : Oscar Faber & Partners
Contractors : George Wimpey & Co., Limited



Air conditioning, ventilation, sanitation and
mechanical services by MATTHEW HALL

It is no longer necessary to have to organise
and co-ordinate the activities of a number of
different sub-contractors.
The Matthew Hall Group of Companies undertakes
all mechanical services economically and efficiently

THE
MATTHEW HALL
GROUP OF COMPANIES

- Air Conditioning
- Heating
- Electricity
- Sanitation
- Sprinklers and
Fire Protection

ESTD 1948



MATTHEW HALL

MATTHEW HALL HOUSE, DORSET SQUARE, LONDON, N.W.1.

Glasgow	Manchester	Bristol	Belfast	Johannesburg	Germiston	Durban
Cape Town	Welkom	Bulawayo	Salisbury (Central Africa)	Ndola	West Indies	

CANADIAN TIMBER

...from Canada's vast forests
a wood for almost every need!

*You are invited to visit
the exhibit of*

CANADIAN TIMBERS STANDS 80/81

**MANCHESTER
BUILDING TRADES
EXHIBITION
OCTOBER 14-25**

**EXHIBIT OF
CANADIAN
TIMBERS
PLYWOODS**
and other products

ALSO

**EXHIBIT OF
TIMBER
FRAME
WALL
CONSTRUCTION**

*Camborne Secondary Modern School
Architect: Sydney Gregson, F.R.I.B.A.
Cornwall County Architect*



CURTAIN WALLING by
JAMES GIBBONS LTD

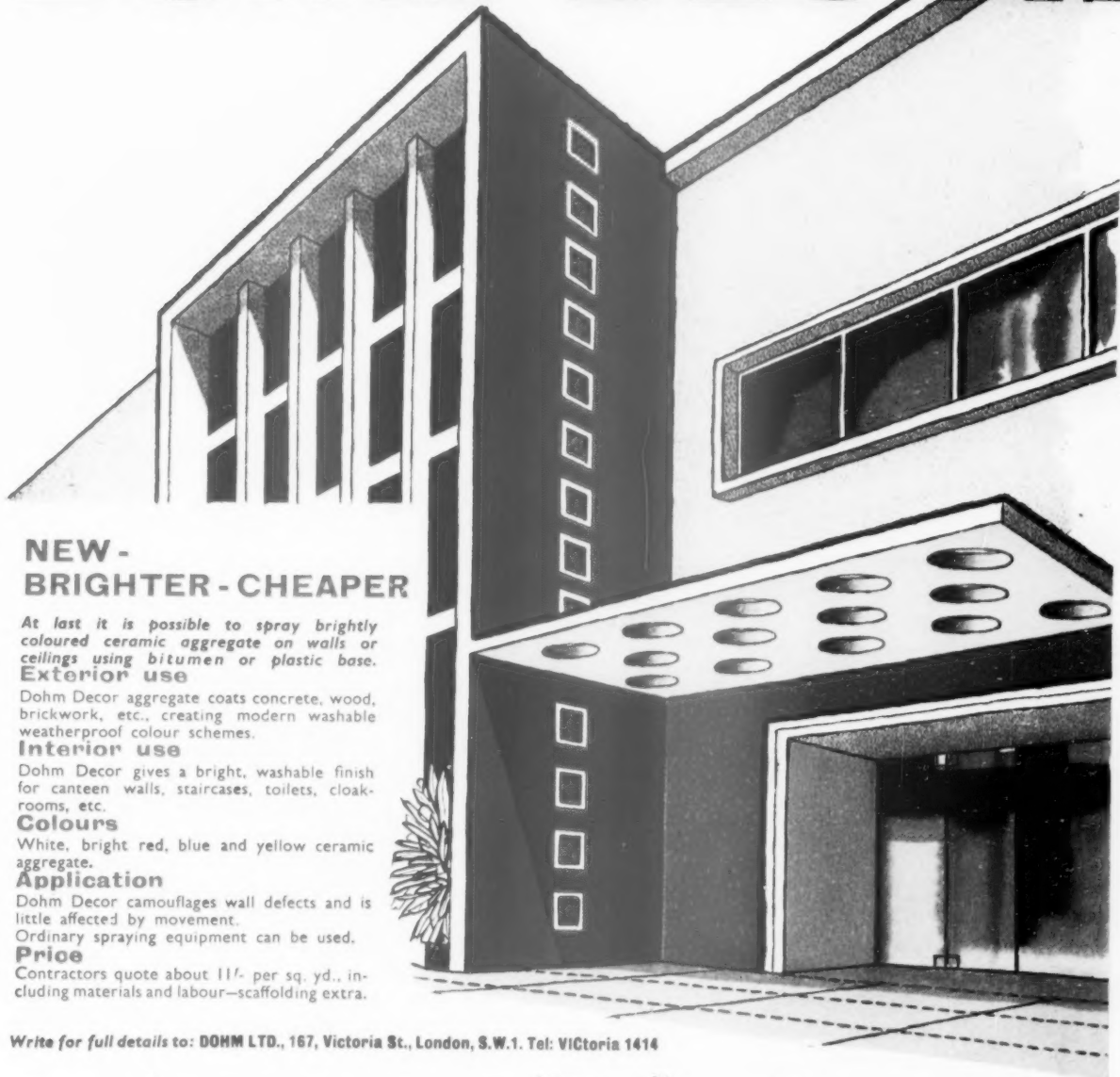
**MAKERS OF PURPOSE-MADE WINDOWS in
ALUMINIUM, BRONZE and STEEL and
WINDOWALL CURTAIN WALLING**

St. John's Works • Wolverhampton • 20401

London Office

74 Southampton Row • W.C.1 • Chancery 5551

NEW Colour Aggregate DOHM · DECOR



NEW - BRIGHTER - CHEAPER

At last it is possible to spray brightly coloured ceramic aggregate on walls or ceilings using bitumen or plastic base.

Exterior use

Dohm Decor aggregate coats concrete, wood, brickwork, etc., creating modern washable weatherproof colour schemes.

Interior use

Dohm Decor gives a bright, washable finish for canteen walls, staircases, toilets, cloak-rooms, etc.

Colours

White, bright red, blue and yellow ceramic aggregate.

Application

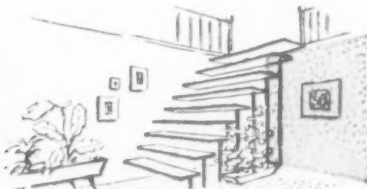
Dohm Decor camouflages wall defects and is little affected by movement.

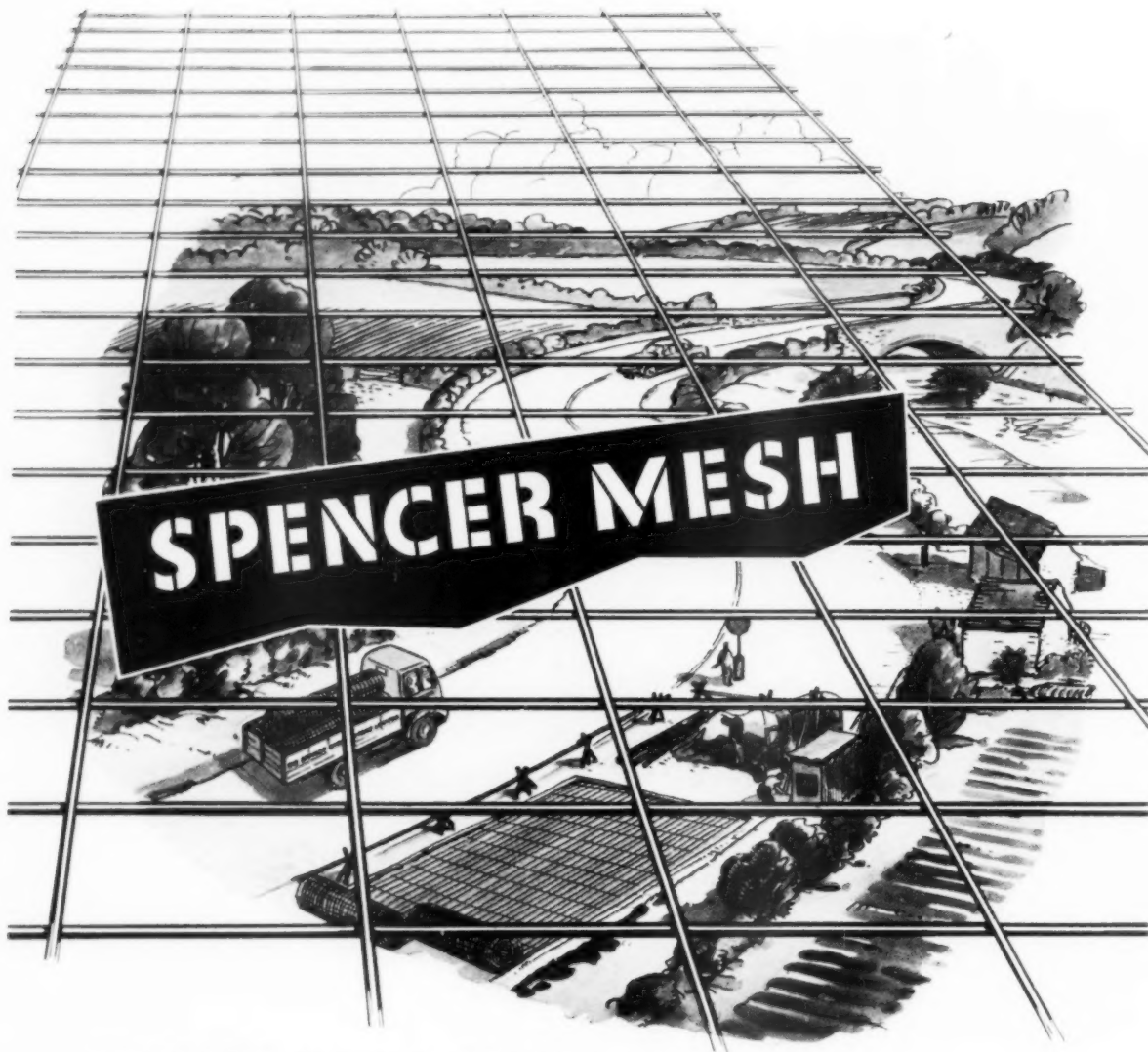
Ordinary spraying equipment can be used.

Price

Contractors quote about 11/- per sq. yd., including materials and labour—scaffolding extra.

Write for full details to: DOHM LTD., 167, Victoria St., London, S.W.1. Tel: VICTORIA 1414





SPENCER MESH, electrically welded from High Tensile Steel Wire drawn in our own mill, is known to Civil Engineers and Builders throughout the world as a first class product for concrete reinforcement in roads and buildings. It is made in accordance with B.S.S. 1221 1945 Part 'A'.

SPENCER MESH is also manufactured in a variety of small meshes suitable for fencing, partitions, guards, shelves and many other uses.

REINFORCED CONCRETE DESIGNS

by our Technical Staff of Structural Engineers

Send your enquiries to our associated company:

The Spencer Wire Co. (Developments) Ltd
53 Victoria Street, London, S.W.1

THE
SPENCER WIRE

COMPANY LIMITED • WAKEFIELD

Telephone • WAKEFIELD 6111 (10 lines) • Telegrams • SPENCER, WAKEFIELD, TELEX
Telex No. 55,160



*Manufacturers of wire for
Industry for over 50 years*



Vauxhall Motors Ltd

choose Ceramic Tiles

In the planning of the vast, £36,000,000 project comprising the new Factories at Luton and Dunstable, foremost in the minds of the architects and their clients, was the need for Wall and Floor surfaces which would be practical, hygienic, yet decorative—and give lasting service. Ceramic Tiles were used in this instance.



Architects: Howard, Fairbairn & Partners
Main Contractors: Sir Robert McAlpine & Sons
Tiling Contractors: A. H. Herbert & Co. Ltd.

Ceramic TILES

Glazed & Floor Tile Manufacturers' Association • Federation House • Stoke-on-Trent

monthly review by

WILLIAMS & WILLIAMS

SPEEDY DELIVERY, SPEEDY ERECTION WIN CONTRACT FOR 'ALUMINEX' PATENT GLAZING

I The big Pirelli factory at Burton-on-Trent required a massive new extension. The new building would house many new machines. But it was also intended to transfer the very heart of the factory to the new building. Heavy machinery, vital to the flow of production, was involved in the move. Speed was of the essence.

The speed and simplicity of erection of 'Aluminex' patent glazing commended itself to the Architects. And that was one of their reasons for selecting 'Aluminex' for the roof and sidewall glazing. Williams & Williams quoted only ten weeks delivery from approval of drawings. And this time was short enough to enable northlight slopes to be cladded as soon as the steelwork was sufficiently advanced.

The price was naturally an important factor further affecting the decision as to choice of materials. The extremely competitive prices quoted for 'Aluminex' clinched the matter.

Although mechanical roof extractors were provided for general ventilation, in certain areas in the factory, where excessive heat was to be generated, additional provision had to be made for rapid dissipation of this heat. This was accomplished by the introduction of large areas of opening northlight glazing operated by electrically controlled Teleflex gear. It was also felt by the clients that the ability to see a clear opening in the roof had a psychologically beneficial effect on the operatives' morale. The good natural lighting achieved throughout the new extension has been greatly welcomed by the staff.

LARGEST CURTAIN WALL INSTALLATION IN FAR EAST IS 'WALLSPAN'

2 The new American International Assurance building is the only structure of its kind in the Far East. Its unique architectural features coupled with local building ordinances and sub-soil conditions necessitated many innovations, especially in materials.

The building's reinforced concrete frame is supported on concrete piles which were driven deep into the muddy swamp that was once Singapore's sea frontage! Far beneath the building was unearthed the remains of the old seawall, built about 1843. The 2-story pediment is faced with sun-absorbing glass,

marble and granite in contrast to the 10-story tower block clad in dark-grey anodized aluminium 'egg-crate' curtain wall, using a high-silicon content aluminium alloy.

The ground floor, a full quarter acre, is occupied entirely by gardens—partly open, partly glass-enclosed; an entrance lobby with two walls of glass; and off-street parking concealed from the lobby by a marble wall. The second story not only covers the entire building site but projects over the pavement as well, providing shade and comfort for pedestrians and making the exotic garden a part of the street scene. Faced with granite, this story provides a broad terrace on three sides of the main tower and carries the landscaping to the third floor level by elaborate plantings along its outer edges.

The gleaming 10-story tower is clad from top to bottom by an unusual and original application of 'Wallspan'. It takes the form of decorative aluminium louvres which, fixed in place both vertically and horizontally, skilfully shield the interior from direct rays of the tropical sun but allow all floors an ample supply of natural daylight. No part of any tower floor is more than 24 feet from a window, and only two columns break into working floor space.

Topping the slender tower is a practically 'weightless' 7-room penthouse, complete with kitchen, baths and large terrace. Extremely light walls are obtained by the use of styrofoam—the white synthetic sponge used in floral decorations. The styrofoam sheets are held in place by 'Wallspan' members.

INTERIOR OF MODERN LABORATORY IS ROFTEN MODULAR PARTITIONING

3 The laboratory is one of many departments of this new Vickers-Armstrongs factory that is tastefully segmented by Roften Modular Partitioning. The colour scheme, selected from the Roften range of 13 standard colours, is black and cream. Black pilasters and skirting; cream infill panels.

Vickers were greatly impressed by the robust construction and superb finish. And they particularly liked Roften's easy interchangeability. All components are made to the finest tolerances, absolute precision of steel parts is ensured by cold-rolling method of manufacture. Complete demountability and interchangeability are very necessary in such a rapidly expanding factory. Indeed, change of office layout is always on the cards.

In those offices where it was felt that undue noise would be distracting to the occupants, double glazing was used with highly efficient results. To supplement the draughtproofing at door jambs and to reinforce the insulation where absolute quiet was demanded, proprietary extruded aluminium and rubber thresholds are fitted.

'HEADLINE' HOUSE HAS STANDARD METAL WINDOWS BY WILLIAMS & WILLIAMS

4 The deeper than usual dormer window of this widely publicised Low Cost All Brick House allows the ceiling joists to be run through without a break.

The use of roof space as part of the habitable area has played a major part in keeping down costs. The actual window fitted in the dormer and the other windows in the house are standard metal windows from the Williams & Williams 'Z' range.

PERMANENT EXHIBITION

See and examine examples from the whole range of Williams & Williams products at the modern showroom at 36 High Holborn, London, W.C.1. Open daily from 9 a.m. to 5.30 p.m.

WILLIAMS & WILLIAMS RELiance WORKS · CHESTER



Member of the Metal Window Association

1 FACTORY EXTENSION, PIRELLI LTD., BURTON-ON-TRENT.

Architects: Douglas & J. D. Wood,
F.R.A.S.B.A.

A Good natural lighting achieved by 'Aluminex' northlight glazing.

B Continuous hinge for opening lights in 'Aluminex' glazing.

2 AMERICAN INTERNATIONAL ASSURANCE BUILDING, SINGAPORE.

Architects-Engineers: John Graham & Co.,
New York and Seattle.

Supervisory Architects: Swan Maclaren,
Singapore.

Contractors: Paul Y. Construction Co.,
Singapore.

A Twelve stories high, it makes an imposing addition to the skyline.

B The main entrance: aluminium doors by Williams & Williams.

C The first floor terrace.

D A close-up view of the cladding.

3 VICKERS-ARMSTRONGS LTD., SOUTH MARSTON, SWINDON.

Laboratory: right hand wall has glass infill panels from cornice height to ceiling.

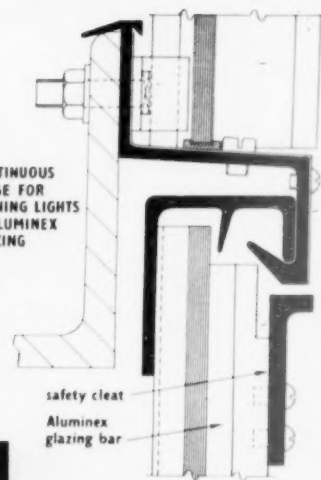
4 GREGORY LOW COST HOUSE.

Architect: J. E. S. Glover, A.R.B.A.



1A

CONTINUOUS
HINGE FOR
OPENING LIGHTS
IN ALUMINEX
GLAZING



1B



2A



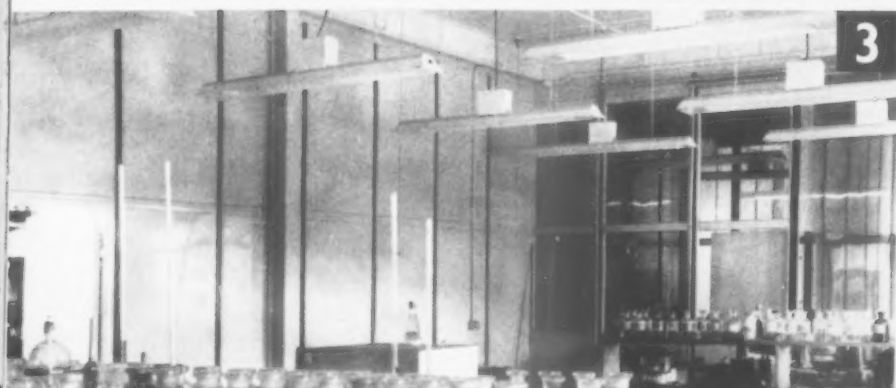
2B



2C



2D



3



4

Auditorium seating

Both in this country and abroad, the reputation gained by Cox for tip-up seating is exceptionally high. For example, they were chosen for the installation of the Royal Festival Hall and of the Free Trade Hall, Manchester. In Venezuela they installed the seating for the great conference hall of the Instituto de la Ciudad Universitaria at Caracas.

Cox are concerned not only with large installations: here are shown models suitable for various sizes of hall.



G1312

Full technical information and price details sent on request



COX & CO. (WATFORD) LTD · WATFORD BY-PASS · WATFORD · HERTS · Watford 5631

G1311



G3084



G2203



RFH1



G2444



New Offices of the Royal Insurance Co. Ltd., Ipswich



The Architect ensured a perfect result by choosing an individual, numbered stock of Blackbean veneer from the extensive range in our permanent showrooms; and by specifying tailor-made panels manufactured in our own factory. The solid timber was selected from the stock we have carefully seasoned taking into account the special treatment required by this most handsome Australian wood.

Architect:
A. D. Cooke, A.R.I.B.A.

Main Contractors:
Sadler & Sons, Ipswich.

Furniture:
Wallace King Ltd., Norwich

**William Mallinson
and Sons Ltd.**

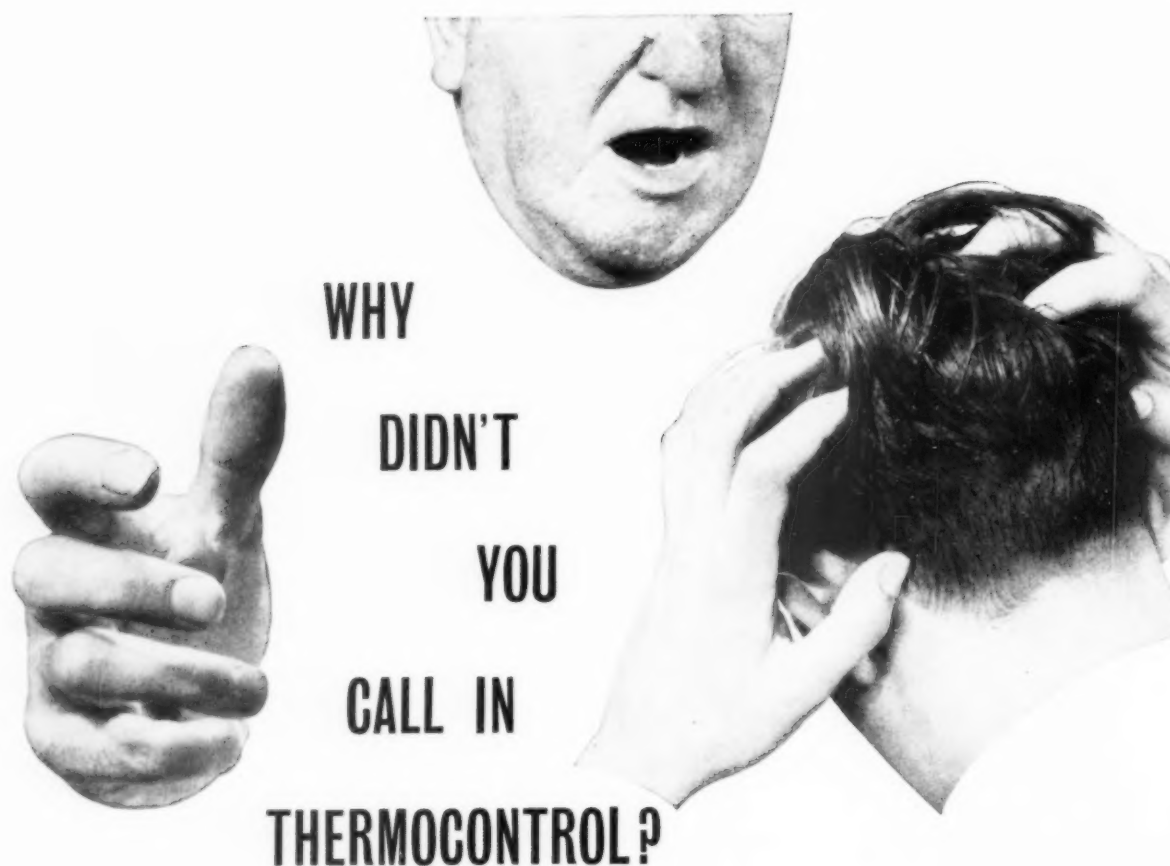
TIMBER and VENEER MERCHANTS

130 HACKNEY ROAD • LONDON • E.2

Telephone Shoreditch 7654

Telegrams 'Almoner' London

MANUFACTURERS OF PLYWOOD • ARMOURPLY • PANELS AND COMPOSITE PARTITIONING



When you and your architect or consulting engineer are planning a heating plant for new offices or factories, call in Thermocontrol early on! Electronic control of heating, ventilating and air conditioning plant is a vital money-saver and a primary design factor. Points like the study of zoning (the south side of many buildings requires less heat) before any pipes are laid are essential. Only by attention to this sort of detail can the full potentialities of controlled heating be realised.

THERMOCONTROL serves:

Architects
Consulting Engineers
Heating and Air Conditioning
Contractors
Factory & Property Owners

THERMOCONTROL has achieved:

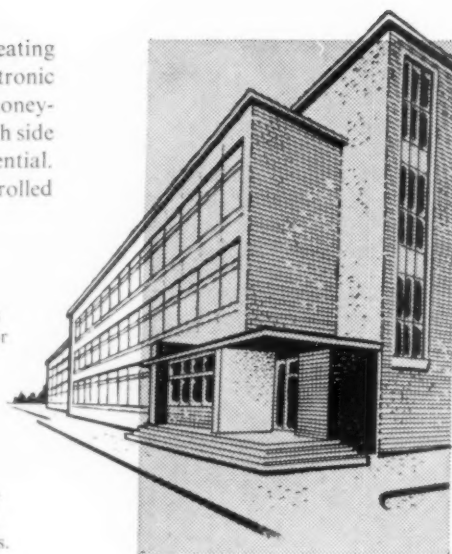
Temperature and humidity control:—
for human comfort
for scientific processes
for substantial savings in fuel

THERMOCONTROL manufactures:

The most complete range of British
manufactured electronic controls for
Air Conditioning
Heating
Refrigeration
Boiler Plant

THERMOCONTROL provides:

An unparalleled advisory service by
qualified electrical, combustion, air
conditioning and chemical engineers.

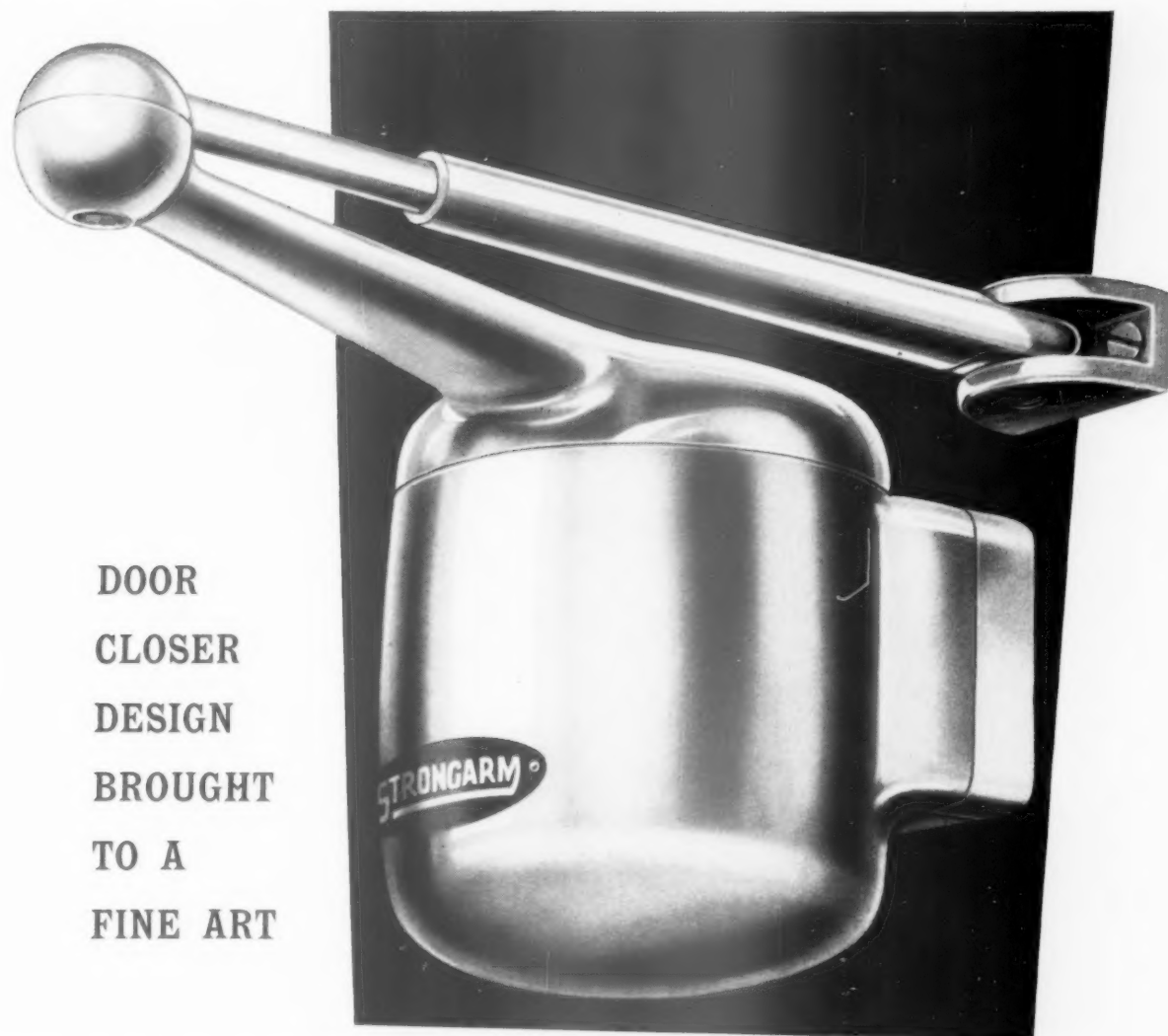


*Have you read the THERMOCONTROL Compendium, Section I
"The field of Automatic Control in Modern Industry"? If not, please write for a copy.*

Thermo control
INST.  CO. LTD.

Thermocontrol Installations Co. Ltd., 2-10 Valentine Place, London, S.E.1

Telephone: WATerloo 7356



DOOR
CLOSER
DESIGN
BROUGHT
TO A
FINE ART

STRONGARM HYDRAULIC DOOR CLOSER

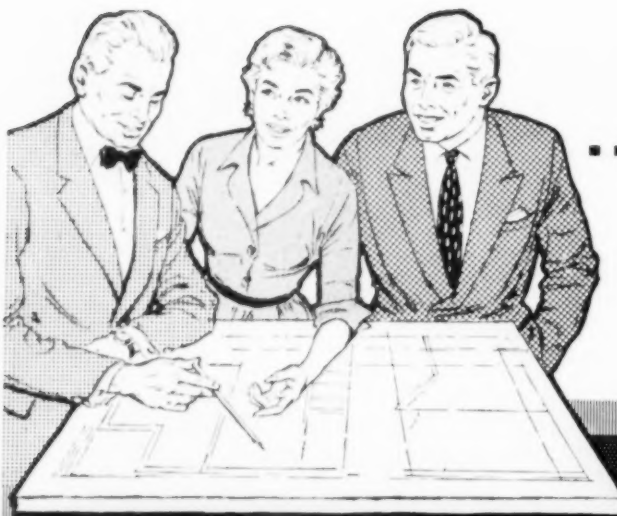
The selective eyes of architects are taking a long look at the Strongarm new look Door Closer. For the first time in the world door closer design, in making a bold break with its rather ugly past, has reached the highest concepts of present taste and preferences. The Strongarm encompasses an efficient mechanism of watch-like precision in its beautiful, compact shape. The quiet perfection of its operation is accountable to the skill, ingenuity and knowledge pooled by some of Britain's foremost hydraulic engineers. Fresh, current thinking has blown away the cobwebs of antiquated design and produced the clean, simple, dustfree lines of the Strongarm. It is the most advanced Door Closer design in Europe or the U.S.A. We suggest you write soon for substantiating data, Leaflet APL.42/C.

SMOOTH - SILENT - POSITIVE



ARMSTRONG PATENTS CO. LTD.

EASTGATE · BEYERLEY · YORKSHIRE



...a **BILSTON**
bath
will be
perfect...



ATLANTA

SPECIAL FEATURES

Choice of lengths includes 72", 66", 61", 60" and 54".

Atlanta flat bottom helps to prevent slipping — a point of special importance if a shower is fitted.

Shallow step is safe for young and old. The Atlanta can be fitted to give an overall height of only 16".

Taps can be fitted in three different positions, to meet all possible requirements.

Corner tap mounting facilitates installation and maintenance.

Supplied with or without overflow — with or without handgrip.

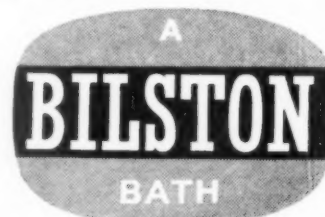
The Atlanta costs no more than an ordinary bath



Bilston

— the bath **SPECIALISTS**

BILSTON FOUNDRIES LTD - BILSTON - STAFFORDSHIRE - Illustrated literature is available on request.





"Let's get out of here please!"

Can't blame him for preferring a run to a sit-down at the local. Even when what he's sitting ON is something as superb as a TRINASCOLIN Floor by Limmer & Trinidad. Everyone but him realises that here is modern decorative flooring at its best, beautiful in appearance and comfortable to the tread.

Laid by craftsmen, TRINASCOLIN produces a floor which is warm, resilient and completely trouble-free. It is available in several thicknesses and in many plain and marbled colours. If you would like technical literature on Limmer & Trinidad Decorative Floors (and on all other Limmer & Trinidad products) you only have to write.

LIMMER & TRINIDAD

DECORATIVE FLOORING

THE LIMMER & TRINIDAD LAKE ASPHALT COMPANY LIMITED, TRINIDAD LAKE HOUSE, 232-242, VAUXHALL BRIDGE ROAD, LONDON, S.W.1

The clean, fresh beauty of "Standard" Sanitary Appliances made of Vitreous China is a joy to behold. A brilliant, practical beauty. A modern beauty that has been achieved by years of planning, styling, shaping and re-shaping. And below the surface there is the beauty of a superb craftsmanship. Inside and out, this Vitreous China ware is really beautiful.

★ In many countries it is officially required that Sanitary Appliances be made of Vitreous China. Many British architects, doctors, and Public Health Authorities would like to see similar legislation in Britain and so, not unnaturally, would the makers of "Standard" Sanitary Appliances.

Whilst the beauty of these appliances can be appreciated at a glance, it takes a lifetime to discover how durable they are. For with Vitreous China comes a higher resistance to harsh treatment than with ordinary ware. Much higher. Their beauty lasts; it is difficult to mar even by accident. And because "Standard" Sanitary Ware made of Vitreous China lasts and lasts, its cost for each year of service is much lower.

Fired at a much higher temperature than ordinary ware, Vitreous China is a dense and non-absorbent material which remains steadfastly hygienic.* And it does not depend on its glaze to make it watertight. It is non-porous and non-crazing. Germs cannot lodge and breed in it. "Standard" Sanitary Ware made of Vitreous China guarantees hygiene for the lifetime of whatever building it serves.

Beauty. Durability. Hygiene. Economy. These are the characteristics
of _____ made
of _____ which appeal to the house owner and
builder no less than to the doctor and the architect.

Visit our Stand No. 29 at the Building Trades Exhibition, Manchester, October 11th-25th.

IDEAL BOILERS & RADIATORS LTD., IDEAL WORKS, HULL



Decorplast gives you **47** exciting colours and patterns

New Decorplast makes working-surfaces and walls really *glow* with colour—sets a new standard in top-class melamine-faced laminated plastics. It's as tough as it's beautiful. Doesn't easily crack, chip, stain or fade. It's cleaned with a damp cloth—because dirt cannot stick. Boiling water, grease, spirits, dilute acids and heat up to

310 F leave new Decorplast bright and colourful as the day it was made.

The whole new range, now in sheets 9' x 4' as well as 8' x 4', thickness $\frac{1}{8}$ ", is *always* available in matt and gloss finishes—plus new wood veneers that really do look like wood! Write to the address below and ask for facsimile Colour Chart and list of Distributors.

Decorplast LAMINATED PLASTIC

Made by Holoplast Limited
SALES OFFICE 116 Victoria Street, London S.W.1
TELEPHONE VICTORIA 9354/7 and 9981

Reed
PAPER GROUP





No "dramatic exit" from this Hotel Garage!



Safe exits (and entries) are assured, at the garage of the Tavistock Hotel in London. The A.T. & E. Traffic Controller has taken all the guesswork out of driving in or out.

The unit is compact, foolproof and low priced. It has widespread industrial application for factory precincts, car parks, level-crossing control, or at any point where private road and rail movements conflict.



Factory Estates A.T. & E.'s new Electromatic Controller establishes efficient and safe circulation of transport within works precincts, both for roads and level-crossings.

Refineries The new A.T. & E. Electromatic Controller provides the extra safety demanded on refinery roads, ensuring efficient movement and dispersal of all types of vehicles.



AUTOMATIC TELEPHONE & ELECTRIC CO. LTD.

Strawger House, Arundel Street, London, W.C.2. Telephone: TEMple Bar 4506.
Telegrams: Strawger Estrand London, Strawger Works, Liverpool, 7.



AT 10921

Fine CRAFTSMANSHIP *that's good!*



Freedom of Choice

When you come to buy veneers, veneered panels or hardwoods, Glikstens offer you the widest possible choice. Stocks of the world's finest specimens, many of which come from remote corners, are always available. Equally consistent is Gliksten's delivery service—your guarantee of getting the veneers and hardwoods you order *on time*.

PHOTOGRAPH BY COURTESY OF E. POLLARD & CO. LIMITED

with GLIKSTEN HARDWOODS
& VENEERS



—that's excellent!

THE FOREMOST NAME IN TIMBER

J. GLIKSTEN & SON LIMITED, Carpenters Road, London, E.15. Tel. AMHerst 3300. Liverpool Office: 87 Lord Street, Liverpool 2. Tel. Central 7576 and Victoria Dock, Citadel Street, Hull. Tel: Hull 31144

There never was a better looking, cleaner working, more efficient central heating boiler than the new **CRANE CAVENDISH**



- A range of solid fuel burning boilers* for whole house warming and indirect hot water supply.
- Elegant and labour-saving design.
- Attractive colour range to match most schemes.
- Rocking grate of new design (patent applied for).
- Ultra-sensitive thermostat (on solid fuel models only) and thermometer sensibly placed near flue control.
- The beautifully finished stove-enamelled jacket is so designed as to necessitate only one set of doors for riddling and fuelling.
- Large capacity ashpan effectively dust-sealed.
- Doors opening to wide angle.

*Also available for oil burning.

RATINGS		OUTPUT B.T.U. PER HOUR
Solid fuel boiler	No. 3	33,000
	No. 4	47,000
	No. 5	61,000
Oil burning boiler	No. 3L	30,000
	No. 4L	45,000
	No. 5L	60,000

A FULLY INFORMATIVE LEAFLET is available on application to
CRANE LTD., 15-16 RED LION COURT, FLEET STREET,
LONDON, E.C.4. WORKS: IPSWICH
Branches: Birmingham, Brentford, Bristol, Glasgow, London, Manchester

G.9

**New Offices for
DECCA NAVIGATOR CO LTD
9 ALBERT EMBANKMENT**

ARCHITECTS:
Messrs. Grace & Farmer
QUANTITY SURVEYORS:
*Messrs. Stanley Griffith &
Partners.*

*"Another impressive
building completed
by Myton!"*



*"Yes, Myton aim to do
a thorough job in
the shortest time."*



Myton are playing an important role in London re-developments. The new Decca building on Albert Embankment is another major construction job which Myton have recently completed. When you call in the Myton team you call in the wide experience and resources of the Taylor Woodrow group:

experience which blends men and machines into a smooth, efficient organisation to tackle the job, and resources which match the scale of the biggest project. Give Myton the signal to go, and you are assured that work will move quickly to a successful conclusion.

**You are seeing more
and more of**

MYTON LIMITED

Building and Civil Engineering Contractors

HEAD OFFICE: 10 PARK STREET - W.1 - GROSVENOR 8871

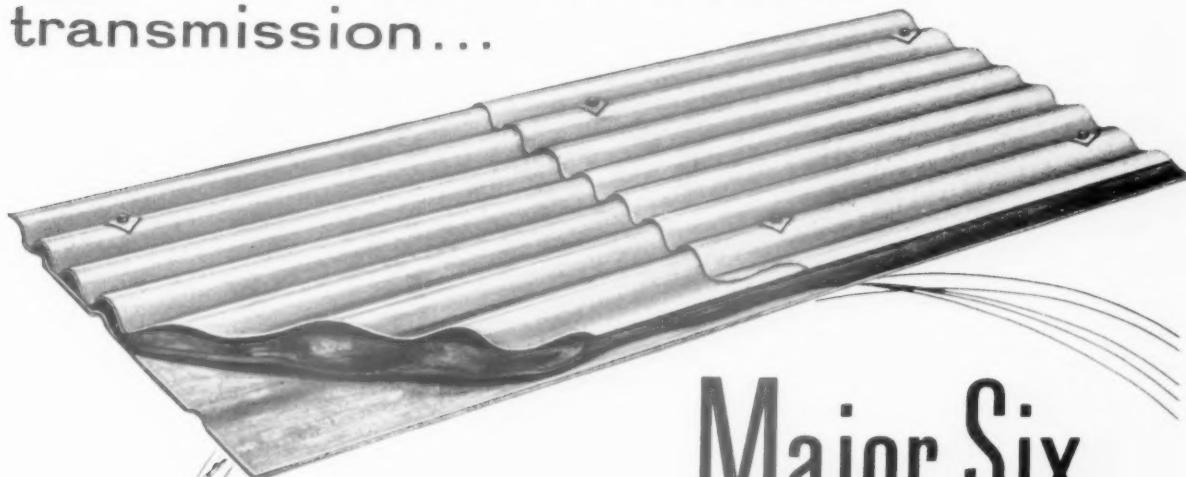
BRANCH OFFICE: NEWLAND - HULL - HULL 42277

MYTON

A member of the **TAYLOR WOODROW GROUP**



High resistance to thermal transmission...



Major Six

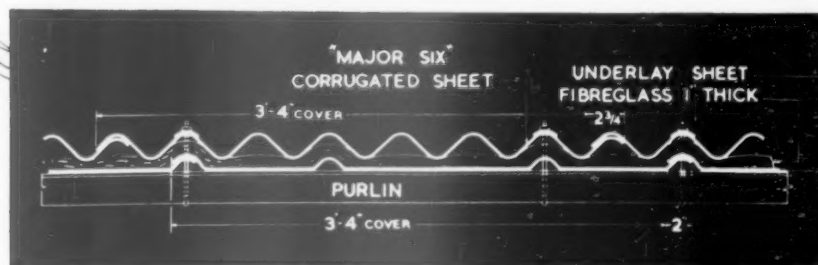
DOUBLE CLADDING INSULATION

"Major six" DOUBLE cladding insulation provides a high resistance to thermal transmission, contributing to higher equable interior temperature and consequent economical heating. Here is dependable roofing made for quick erection and permanent service.

It's the DOUBLE cladding that does it!—a rigid asbestos-cement underlining sheet laid directly to purlins as a soffit upon which the sheet of insulation is laid before putting the "Major six" sheet in position.



Photograph above illustrates interior view of roof



Easily fixed with hook bolts and washers. "Major six" Double Cladding Insulation complies with the requirements of "Thermal Insulation Industrial Buildings" Bill.

ARTILLERY HOUSE • ARTILLERY ROW • LONDON SW1

Telephone: ABBey 3081 Telegrams: "Atlstonco, Sowest"

Works at: MELDRETH, Nr. Royston Herts.

Also at: GREENHITHE • STROOD • CAMBRIDGE • SHORNE • RYE (Sussex) • GT. YARMOUTH

ROBERTSON VENTILATION

for natural ventilation at its best

All Architects concerned with the design of industrial buildings should have for reference a copy of the NEW Robertson Ventilation Data Book. Write for your copy NOW!



Would you like to see — right on your office desk — a practical demonstration of wind effect on various types of ventilator? We will gladly arrange for one of our Ventilation Demonstration Machines to be brought to your office on a day and time convenient to you.

For more than 30 years ventilation problems associated with the diverse requirements of Industry have been solved by Robertson Specialist Ventilation Engineers.

PLANNED VENTILATION SCHEMES have been designed by the Robertson Ventilation Division for all kinds of manufacturing processes — schemes to meet conditions of exceptionally heavy air pollution — schemes for rapid air change — schemes for Light Industry where air pollution is less, but air condition more critical. In fact, PLANNED VENTILATION SCHEMES for ALL problems of ventilation.

These years of accumulated experience are available to assist you to solve your problems of heating and ventilation. A card, or telephone request, will bring to you a Robertson Specialist Ventilation Engineer, who will co-operate with you on any problem of ventilation. This service is freely available — please make full use of it.

Meantime, if you have not already received your copy of the revised Ventilation Data Book, write for it today. You will find the information it contains both helpful and interesting.

ROBERTSON THAIN LIMITED

ELLESMERE PORT • WIRRAL • CHESHIRE

Telephone: Ellesmere Port 3622-9

Telegrams: 'Robertroof'

Sales Offices: BELFAST • BIRMINGHAM • CARDIFF • EXMOUTH • GLASGOW • IPSWICH • LIVERPOOL • LONDON • MANCHESTER • NEWCASTLE • SHEFFIELD

Associated Companies or Agents in most countries throughout the world

Via



FULLY ILLUSTRATED COMPREHENSIVE TECHNICAL BROCHURE

FREE!

FOR BIG SAVINGS IN CONCRETE FORMWORK

If concrete is your business you will find this latest Rawlplug Company publication of great value and interest. It is packed with practical, down-to-earth information on shuttering problems, together with details of Rawlties, Rawloops and Rawlhangers. May we send you a copy? Apply on your letterheading, send business card or state trade or profession.

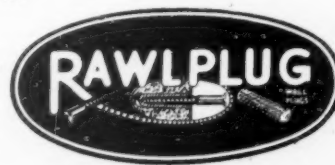
Lower the cost of raising the shuttering with RAWLTIES • RAWLOOPS • RAWLHANGERS

These popular Fixing devices are designed to facilitate the speedy erection, striking and re-erection of formwork for all types of concrete work. This is achieved by providing anchorages to which the Shuttering can be Fixed and struck easily and quickly. They have many applications in Civil Engineering and Building construction for all types of buildings and in docks, reservoirs, airports, railways, bridges, silos, power

stations, harbours, dams, sewage schemes, oil refineries, bunkers, water towers, etc. In fact, wherever formwork is required for concrete. They minimise the use of scaffolding and obviate the use of through bolts. They form a positive contribution towards savings in timber, steel, time and manpower, with a consequent saving in building costs. They are extremely strong, simple and adaptable.

THE RAWLPLUG CO. LTD., CROMWELL RD., LONDON, S.W.7

The World's Largest Manufacturers of Fixing Devices



*When vibration
is a problem*

Pressure Piling provides the answer

Leas Cliff Hall, owned by the Folkestone Borough Council, is sited on a cliff face. Owing to the cliff showing signs of slipping (note the exposed foundations in the photograph), it was decided to construct a protection apron at ground floor to carry the rainwater away from the existing foundations.

It was feared that any vibrations might cause further movement and the sloping ground made access difficult to the site.

Their problem was solved by adopting the Pressure Piling System. Without causing any vibration piles were sunk to a depth of 40 ft. and reinforced with heavy steel joists. One of these joists can be seen in the illustration as it is being lowered into a borehole.

General Contractors: Messrs. Richard Costain Ltd.



THE PRESSURE PILING COMPANIES

THE PRESSURE PILING COMPANY (PARENT) LTD
637 Old Kent Road, London, S.E.15. Tel: New Cross 0357/8/9

*Enquiries for the North of England,
Scotland, Northern Ireland and Eire should be addressed to:—*

THE PRESSURE PILING COMPANY (NORTHERN) LTD
Charnley Fold Lane, Bamber Bridge, Nr. Preston
Tel: Preston 85723

Architects and Engineers are invited to write for a copy of 'The Pressure Piling System'. It gives you technical data on piled foundations and under-pinning for rapid vibrationless construction and repairs. It is free and post free.

The original and Largest Bored Piling Specialists in the World

STEEL

The new JOHN LEWIS Store

This great store, which will cover an important island site adjoining Oxford Street, is being built in six stages, so arranged that the maximum business use can be made of the site while construction proceeds. The first stage is shown completed in the left of the lower photo.

*Architects: Messrs. Slater & Uren, F.F.R.I.B.A.
Consulting Engineers:
Messrs. Hurst, Peirce & Malcolm, M.M.I.C.E., M.M.I.Str.E.*

**BRITISH CONSTRUCTIONAL
STEELWORK ASSOCIATION**

Artillery House, Artillery Row, Westminster, London, S.W.1



BCSA

FORMICA*



CURVED SURFACES!

Formica Ltd. have perfected a development that you will welcome. This is the new post-forming process, by which FORMICA decorative laminates can be shaped into curves to your design requirements.

Look at the picture above. You will get a quick idea of some of the possibilities if you refer to our picture. (We have chosen a kitchen as an illustration, but the principle has, obviously, a much wider range.) You can now legislate for simple or multiple curves, both convex and concave, in the great majority of FORMICA

patterns and colours; and you can apply this to large surfaces and small, to the lining of a cocktail cabinet or the panelling of a lift . . . to the rounding of a pillar or a counter-edge.

May we send you fuller particulars? Most contractors are now conversant with the simple techniques involved. We shall be pleased to send you fuller data—and our Technical Service Department is at *your* technical service, for consultation on any problem or any unusual application.

FORMICA—the finest of all the decorative laminates

*FORMICA is a registered trademark. Formica Ltd, Architects' Postforming Enquiries, De La Rue House, Regent Street, London W1



Architects
 Chief Architects' Division MOW
 (Senior Architect in charge —
 H. E. FURSE, L.R.I.B.A.)



another Royal Occasion

The Royal Yacht, H.M.Y. Britannia, brought His Royal Highness,
 The Duke of Edinburgh, to Plymouth on the 29th July,
 for the opening of the Royal Naval Engineering College at Manadon.

We are proud to have had the privilege of supplying the paints,
 both Interior and Exterior, for this magnificent Naval Building
 and to associate ourselves with yet another Royal Occasion
 for which Leigh's Paints have been selected for their
 exceptional quality and appearance.

*Her Majesty's
 Yacht Britannia
 Painted and Protected
 with
 LEIGH'S
 WHITE*



LEIGH'S PAINTS

FOR PROTECTION · APPEARANCE AND ECONOMY

Sole manufacturers

W. & J. LEIGH LTD · LONDON · BOLTON · GLASGOW

MANUFACTURERS OF FINE PAINTS FOR DECORATIVE AND INDUSTRIAL USE

PLANTATION HOUSE
MINCING LANE - CHEAPSIDE
Architects:
Albert W. Moore & Son



ROMAN HOUSE - LONDON WALL
Architect:
R. N. Wakelin
of Campbell-Jones & Sons



MERCERS' HALL - CHEAPSIDE
Architects:
Gunton & Gunton



HOLBORN VIADUCT HOUSE
HOLBORN CIRCUS
Architects:
T. P. Bennett & Son

1 NOBLE STREET
GRESHAM STREET
Architects:
Ellis, Clarke & Gallannaugh



ROYAL LONDON HOUSE
(EXTENSION) FINSBURY SQUARE
Architect:
H. Bramhill



WATLING HOUSE - CANNON STREET
Architects:
Easton & Robertson



34-35 KING STREET - EC
Architects:
Alan W. Pipe & Sons

WALBROOK HOUSE
CANNON STREET - WALBROOK
Architect:
Henry Tanner



12-20 CAMOMILE STREET
Architects:
Fitzroy Robinson
& Hubert H. Bull



MCCANN-ERICKSON HOUSE
FETTER LANE
Architects:
Hannen & Markham



BUCKLESBURY HOUSE
Architects:
Campbell-Jones & Sons



ST. BRIDGET'S HOUSE
BRIDEWELL PLACE
Architects:
Trehearne &
Norman Preston & Partners



SADDLERS' HALL · GUTTER LANE
Architect:
L. Sylvester Sullivan

3-10 FINSBURY SQUARE
Architects:
Lewis Solomon Son & Joseph



THE AMALGAMATED PRESS
FARRINGDON STREET
Architects:
Ellis, Clarke & Gallannaugh



**The city
re-builds with ...**



BANK OF LONDON
& SOUTH AMERICA
QUEEN VICTORIA STREET
Architect:
Victor Heal

CRITTALL WINDOWS



THE CRITTALL MANUFACTURING CO. LTD · BRAINTREE · ESSEX · BRANCHES & DEPOTS THROUGHOUT THE COUNTRY



go on duty

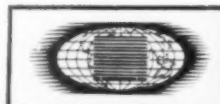


The alarm sounds, the great doors slide smoothly back, and in seconds the gleaming appliances are on their way to deal with yet another outbreak of fire. It is their constant, instant response to the demands made upon them, that makes Brady Sliding Shutter Doors the regular specification for fire stations, police garages, aerodromes, and all types of public, commercial and industrial buildings. Made in steel or aluminium to proved designs, their robust reliability ensures years of service. They are attractively finished with glazed vision or ventilation panels as required, and are easily operated by hand, push button, ray, or autopad control. Send for illustrated leaflet D21/158



G. Brady & Company Limited, Manchester, 4. Telephone COLlyhurst 2797/8/9.

BRADY FOR EVERY OPENING: BRADY ROLLING DOORS IN STEEL, WOOD AND ALUMINIUM - SLIDING SHUTTER DOORS - GRILLES IN STEEL, ALUMINIUM OR NYLON - UP AND OVER DOORS - FIREPROOF DOORS - COLLAPSIBLE GATES - SLIDING DOOR GEAR



BRADY
SHUTTERS - ROLLING DOORS

THE DOORS COMMANDING THE WORLD'S LARGEST SALE—
London, Birmingham, Glasgow, Montreal, Port Credit, Hong Kong

Enter 27 Pavilion



RUBEROID CASE HISTORIES



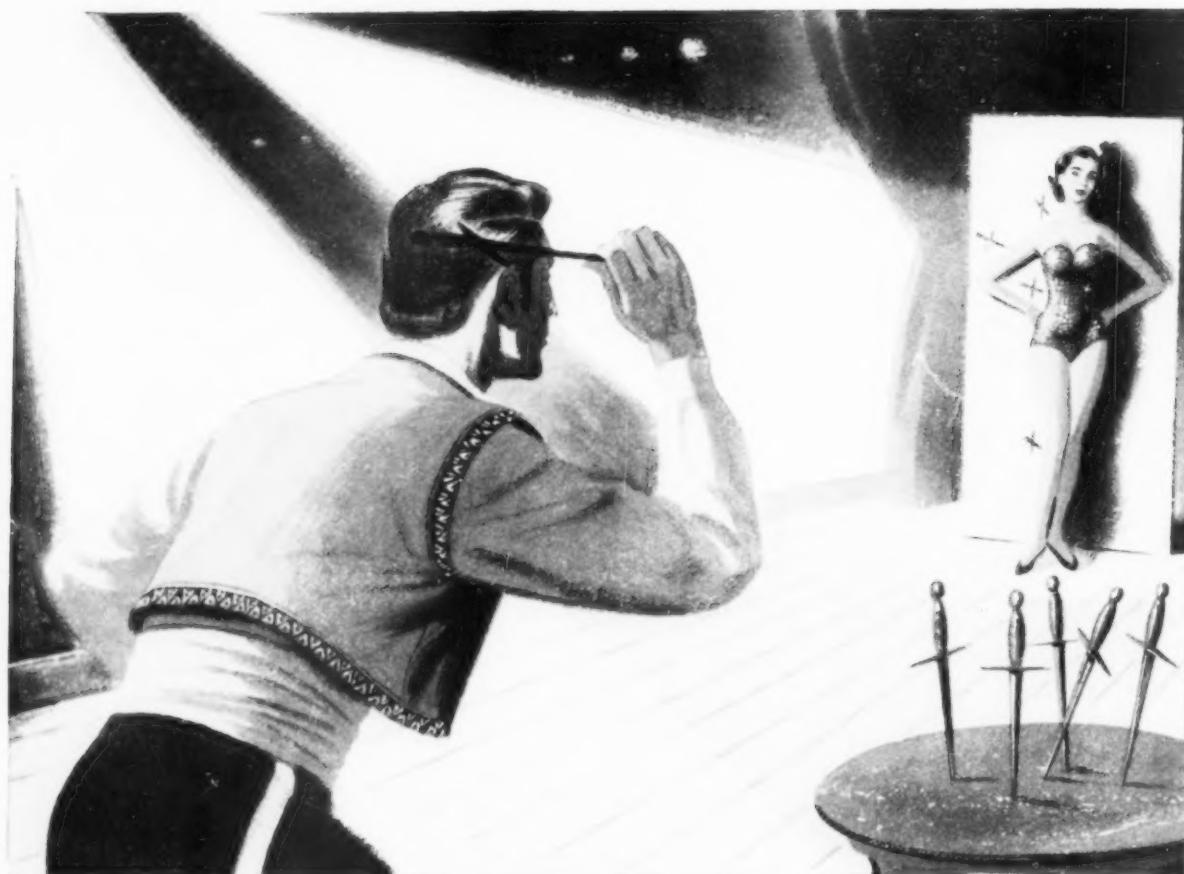
Roll out the carpet for hyperbolic paraboloid!

Much architectural interest is being focused on the unusual roof designed by Architect Mr. Robert Townsend, F.R.I.B.A., for The Wilton Royal Carpet Factory Limited, using a Ruberoid

Built-Up Roof with a mineral surfaced Capsheet. First roof of its kind to be erected in this country, first and only roof ever to be built in timber on the multiple hyperbolic parabola principle, and a great triumph for its adventurous designer, for using a basically simple geometrical principle to such good effect.

The roof consists of four panels of hyperbolic paraboloid shells, each 57 ft. 5 in. square, supported independently by a concrete column at the mid-point of each side and weatherproofed with Ruberoid Built-Up Roofing.

RUBEROID



CONFIDENCE ...

**MONTGOMERIE'S
FINISHES FOR ALL
DECORATIVE AND
INDUSTRIAL PURPOSES**

manufacturers of:-

Purovar Enamel.

Artesco Emulsion Coating.

Rustration Calcium Plumbate Anti-Corrosive Primer.

Emeskote Chemical Resisting Enamel—Air Drying Epikote Resin Based Coating.

Petrifoid 'S' Water Repellent—Solution Based on 'Dri-sil' Silicone.

the basis of the artists superb performance . . . the essential when you are specifying materials or **PAINT** for that new important assignment.

If it's **PAINT**, and if it's produced by **montgomerie stobo**—then you can have all the confidence in the world in recommending it for quality, durability, colour fastness and 'rightness for the job'—nothing is left to chance in its manufacture, which probably accounts for the number of new projects on which it is being used to-day!

★ Technical Advisory Service for specifications and colour schemes.

★ All shades to B.S.S. 2660. 1955 Colour Classification.

★ On Site Technical Service available to architect and builder.



montgomerie, stobo & CO LTD

Deeside, Saltney, Nr. Chester.
Telephone Chester 23128 (3 lines)
Telegrams 'Turpentine' Chester.

136/154 Stranmillis Road, Belfast.
Telephone Belfast 67978.
Telegrams 'Turpentine' Belfast.

52-72 Rogart Street, Glasgow, S.E.
Telephone Bridgeton 1005/6/7.
Telegrams 'Turpentine' Glasgow.

Also at Slough



**STRONGER -
LONGER -
FOR PERFECT
INSULATION**

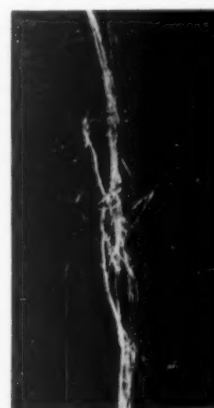
SUGAR CANE FIBRES *from the British Commonwealth*

Look at cane fibres under a microscope. See how amazingly long they are. During manufacture these fibres interlock and interweave to give Celotex Insulation Board unique strength and durability.

Most ordinary insulation boards are made from short vegetable fibres. No doubt about it, the long cane fibre is tough, naturally resistant to rot and you find it ONLY in Celotex CANE FIBRE INSULATION BOARD.

Here is an Insulating Board . . . a superb Board . . . at a competitive price PLUS good delivery, constant high quality and a unique after sales technical service. That's CELOTEX CANE FIBRE INSULATION.

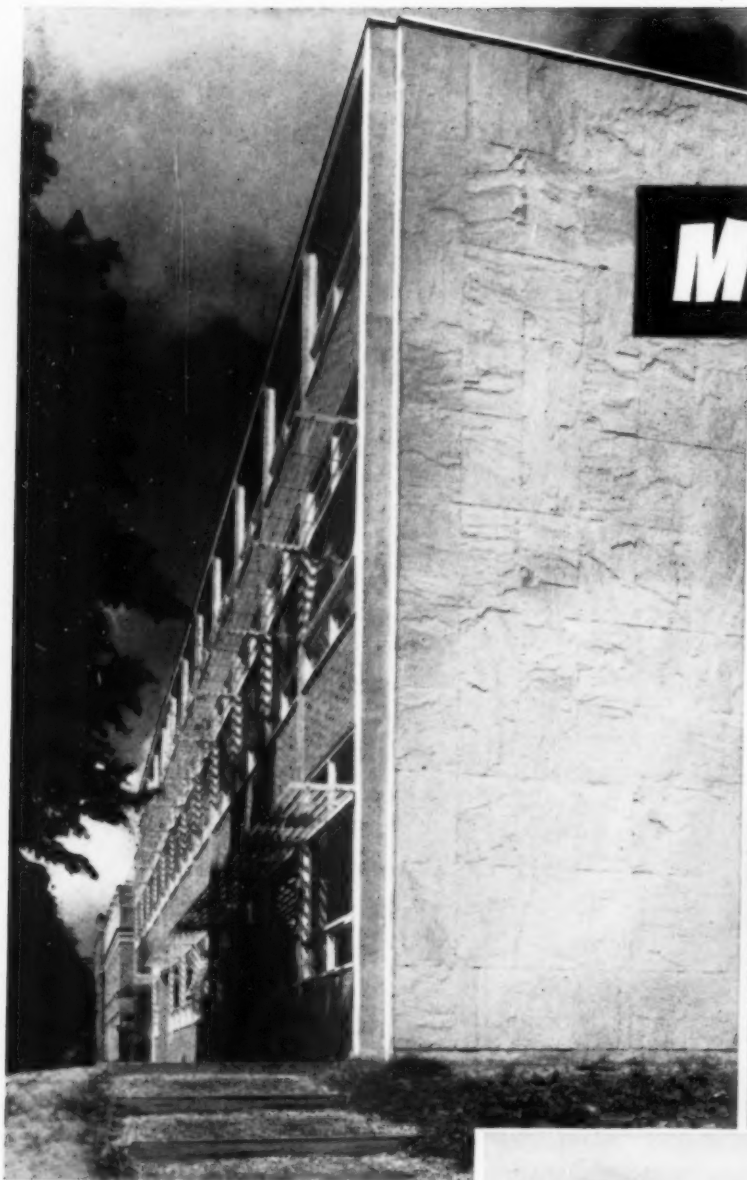
Ask for it by name and if you need technical advice, without obligation, it's yours for the asking—from the Celotex Technical Advisory Service.



Sugar Cane Fibre under a microscope. See how long the tough fibres are.

CELOTEX REGD TRADE MARK **cane fibre insulation**

CELOTEX LIMITED, North Circular Road, Stonebridge Park, London, N.W.10. Telephone: Elgar 5717 (10 lines)



MARSHALL'S

Producers of HARD YORK STONE

from the Elland Edge bed of Flag Rock. A compact stone of fine grain and texture

Weight per cu. ft. 164 lb.
Crushing strength 692 tons per super ft.
Absorption 2.1% of dry weight

**WALLSTONES • STEPS • PAVING
RIVEN FACING SLABS**

GARDEN STONE • CRAZY PAVING
GARDEN WALLING • RECTANGULAR PAVING
Garden Layouts to plan



SOUTHOWRAM STONE

is suitable for all climates and industrial conditions. As used on Bradford Royal Infirmary, in the reconstruction of the Free Trade Hall, Manchester, and in numerous schools for West Riding C.C. and other local authorities.



HYDRAULIC PRESSED CONCRETE FLAGS
HYDRAULIC PRESSED KERBS
PRECAST CONCRETE UNITS • CILLS
LINTOLS • POSTS • STEPS & COPING



S. MARSHALL & SONS LTD.

SOUTHOWRAM QUARRIES
HALIFAX • YORKSHIRE
Tel. Halifax 4788/9

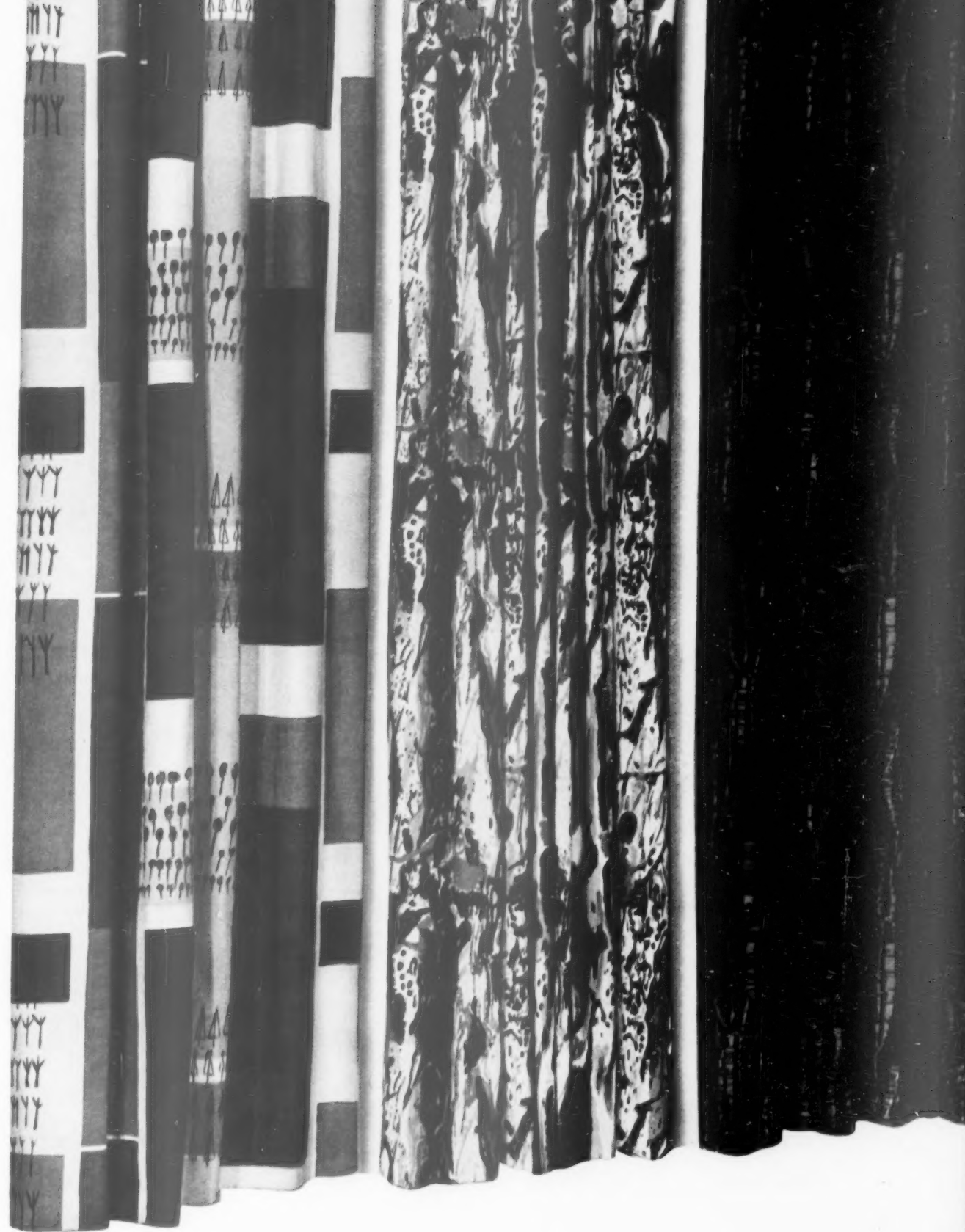


Above, Left: Riven Stone at Southlands College, Wimbledon. Architects: F. R. S. Yorke, E. Rosenberg, C. S. Mardall, FF/R.I.B.A. Assistant in charge, Lloyd A. Smith.

Above, Right: Rectangular Garden Paving. Garden Architect: Percy S. Cane, Esq., S.W.I.

Left: Stone Walling, Ling Bob Primary School, Halifax. Architect: K. W. Craven, A.R.I.B.A., Dip.T.P., A.M.T.P.I.

HEAL'S 1958 DESIGNS

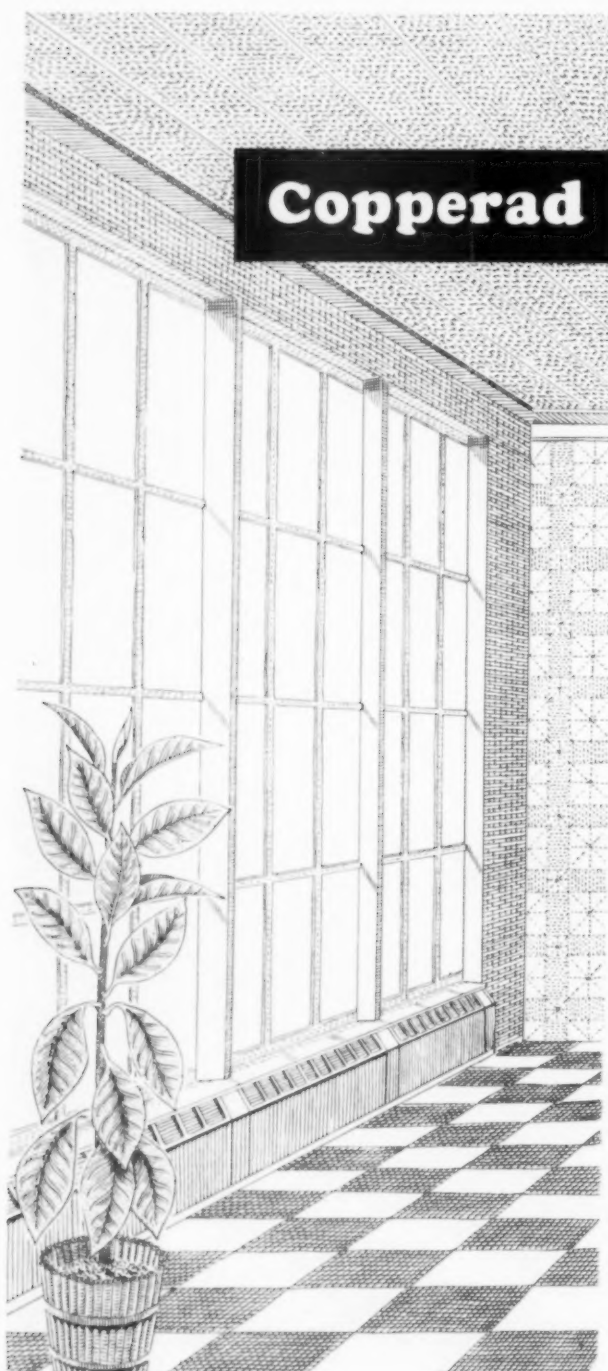


chosen for display
at the Brussels
world fair

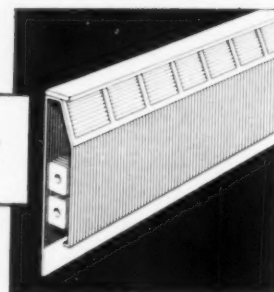
These three outstanding successes from Heal's 1958 designs have been chosen for display at the Brussels fair. Please write for patterns. From left to right: 'Plantation' by Lucienne Day, 'Oak' by Dorothy Carr, 'Sargasso' by Jane Daniels. All these printed cottons or satins are 48" wide.

HEAL'S 196 TOTTENHAM COURT ROAD LONDON W1 TELEPHONE MUSEUM 1666

again
Copperad introduce *the latest* heating development



Copperad *Sill-line*



an entirely new and
versatile heating system
UNOBTRUSIVE
—flexible in application

sill-line works in this way

Copperad SILL-LINE is a flexible heating system specially designed for large office blocks and similar establishments built on the uniform module arrangement. Whether the interior space is to be used as a large single general office or subdivided into smaller offices from time to time, Copperad SILL-LINE remains thoroughly effective—giving uniform heat output from every foot run.

sill-line improves interior design

Copperad SILL-LINE fits neatly beneath window sills in a continuous run emitting even warmth along the entire wall. SILL-LINE is fitted along outside walls where the greatest heat loss occurs and the greatest heat input is desirable. Its design is attractive. No screw heads are visible and the greater part of fitting is carried out by means of clips and spring fixings. Telephone cables and electric supply lines encased in metal conduit may be conveniently fitted beneath SILL-LINE if desired.

Copperad SILL-LINE provides MORE uniform heat, occupying LESS useful space at LOWER cost. Send for Publication S101.

Copperad Ltd. Head Office & Works: COLNBROOK, BUCKS. Telephone: Colnbrook 2521 (6 lines) Telegrams: Copperad, Colnbrook

Scottish Office:
53 George Street,
Edinburgh 2
Telephone:
CAEdonian 1562

London Office:
1 York Street,
Baker Street,
London, W.1
Telephone:
WE1beck 1226/7

Birmingham Office:
Wolverley House,
18 Digbeth,
Birmingham 5
Telephone:
MIDland 1553

Representatives at:
Glasgow, Belfast, Bristol,
Cardiff, Manchester,
Leeds, Nottingham,
Newcastle-on-Tyne

Also at:
Amsterdam, Auckland (N.Z.),
Johannesburg, Lisbon,
Brussels, Toronto,
Melbourne



the finishing touch

WINCILATE

slate copings

are non-porous, inert,
do not warp, shrink or rot
and ensure a crisp,
precise skyline

THE BOW SLATE & ENAMEL CO., LTD
B.R. Depot, Old Ford Road, London, E.3
Telephone: ADVance 2203
(Proprietors of the Aberllefenni
Slate Quarries)



The perfect trio for successful decoration . . .
Hadrian Gloss Paint, Synflat P.V.A. Emulsion Paint
and Ashley Wallpapers—specially produced in matching
shades for planned colour harmony.

THE SUNNINGDALE SCHEME

Fireplace wall	Ashley Wallpaper 244b
Chimney breast and other walls	Ashley Wallpaper 2545
Ceiling	Jonquil Synflat
Woodwork	Mushroom Hadrian
Door	Sorrento Hadrian

43
SMITH & WALTON LTD., HALTWHISTLE, NORTHUMBERLAND

FIRE PROTECTION TO FLOORS		FIRE PROTECTION TO WALLS		FIRE PROTECTION TO COLUMNS
Non-combustible floors 		Combustible floors 		Columns
1 2 HOURS 		External walls 	Internal walls 	
1 HOUR 				
2 HOURS 				
4 HOURS 				

Proven fire protection

By means of extensive full scale tests by the Joint Fire Research Organisation, Cape Building Products Limited have successfully evolved constructional details for the fire protection by Asbestolux of a wide range of structural elements. This range of details will be continually extended by further tests carried out in the course of a long term development programme.

These specifications apply only to Asbestolux and cannot directly refer to any other board material. No other sheet material has been proved to give so great a range of fire protection.

In a public demonstration firing staged by Cape Building Products on 28th May 1957, a full-size 3-bay industrial structure stood up virtually undamaged to temperatures in excess of those required by the British Standards 6-hour Fire Test. For a full account of this demonstration, write for a free copy of the 'Report and Findings.'

ASBESTOLUX

the unique asbestos insulation board



CAPE BUILDING PRODUCTS LIMITED Cowley Bridge Works, Uxbridge, Middlesex. Tel: Uxbridge 4313
Glasgow: Eagle Buildings, 217 Bothwell Street, Glasgow, C.2. Tel: Central 2175
Manchester: Floor D, National Buildings, St. Mary's Parsonage, Manchester 3. Tel: Blackfriars 7757
Birmingham: 11 Waterloo Street, Birmingham 2. Tel: Midland 6565-6-7
Newcastle: 19 & 20 Exchange Buildings, Newcastle upon Tyne. Tel: Newcastle 20488

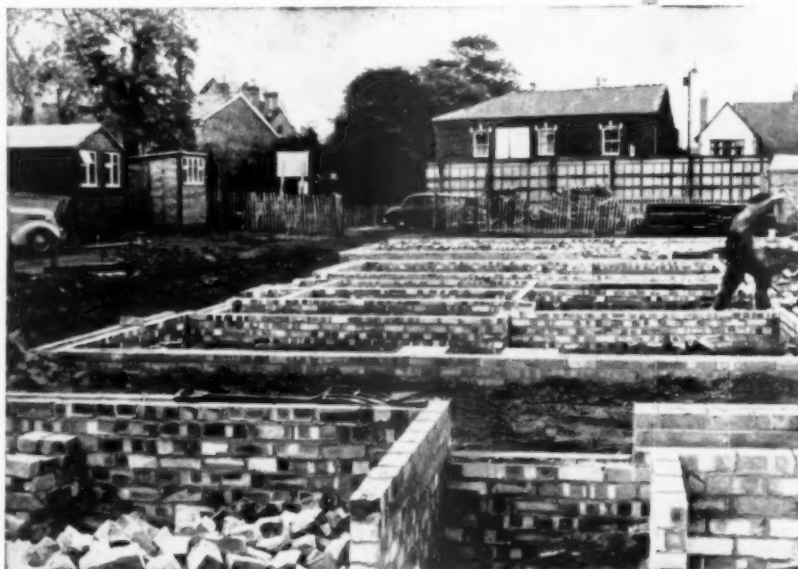
BRICKS AND DOMESTIC ARCHITECTURE

FLETTONS AND FOUNDATIONS

BELOW D.P.C.

In this country where frost rarely penetrates more than a few inches below ground and subsoil moisture conditions remain comparatively uniform the use of 'Phorpres' Flettons for footings is long established practice. Although bricks in footings may be wet they are not subjected to long spells of frost.

Whilst calcium sulphate and magnesium sulphate are present in some soils and other soils are naturally slightly acid, these salts and acids have no effect whatsoever on properly burnt clay bricks. They can and do attack Portland Cement and some limes used in mortar and concrete. For this reason it is good practice in heavily contaminated soils to use sulphate resisting cement to avoid disruption of the mortar.



'Phorpres' Flettons being laid in foundations of the Birmingham Corporation Housing Development at Laurel Road, Handsworth, Birmingham

BETWEEN D.P.C. AND GROUND LEVEL

Practical experience has shown that 'Phorpres' Flettons are entirely suitable for use between D.P.C. and ground level.

Although conditions might in theory seem more severe the building above D.P.C. undoubtedly affords some protection and the conditions obtaining are hardly those of 'extreme exposure' as defined by the Building Research Station.

No case of failure has ever been reported and 'Phorpres' Flettons are specified for foundations by many leading architects and over 400 principal authorities engaged in domestic architecture.



PHORPRES

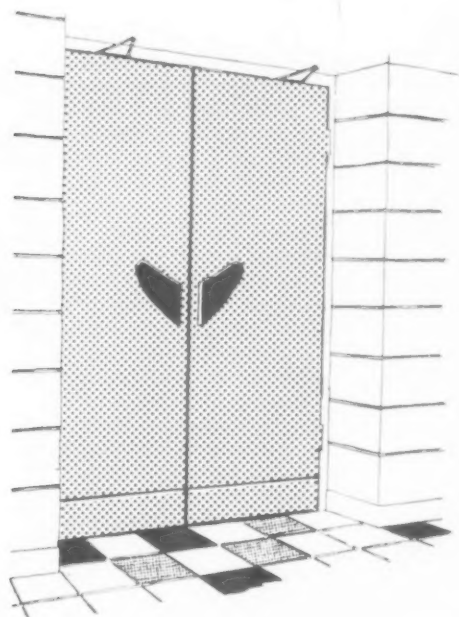
LONDON BRICK COMPANY LIMITED

*in the service of the
building industry*

Head Office: Africa House, Kingsway, London, W.C.2. Telephone: Holborn 8282
Midland District Office: Prudential Buildings, St. Philip's Place, Birmingham 3. Telephone: Central 4141
South-Western District Office: 11 Orchard Street, Bristol 1. Telephone: Bristol 23004/5
Northern District Office: St. Paul's House, 20-22 St. Paul's Street, Leeds. Telephone: Leeds 20771



BY APPOINTMENT
TO HER MAJESTY
QUEEN ELIZABETH II
BRICK MAKERS



Only the SLIM arms can be seen

The "No. 500" is a new door closer designed for use when the appearance of the door and surroundings are of first consideration. With nothing visible except the slim arms, which are styled to be as streamlined and unobtrusive as possible, it achieves complete concealment without loss of power or door control. The "No. 500" is suitable for internal single-action doors not exceeding 7' by 3' in size, and 70 lbs. in weight.

- * Smooth and silky check-action.
- * Bounce completely eliminated.
- * Closing and latch speed fully adjustable.
- * Stand open device put in and out of action as desired.
- * Body only $1\frac{1}{2}$ " wide, overall length 13".
- * Opens to 90° or 180° according to fixing position.
- * No oil leakage.



N^o500

PATENTS PENDING

Concealed Overhead Door Closer

William Newman & Sons Ltd.

HOSPITAL STREET BIRMINGHAM 19

PIERHEAD LTD.

SPEKE BOULEVARD,
LIVERPOOL, 24
Telephone: Hunts Cross 1311-2-3

LONDON FACTORY:
FAGGS ROAD, FELTHAM, MIDDLESEX
Telephone: Feltham 3011

PIERHEAD

PRESTRESSED

CONCRETE



Architect:

Frank Scarlett, B.A., F.R.I.B.A.

Contractors:

Hinkins & Frewin Ltd.

The Pierhead prestressed floor and roof construction at the offices for The Northern Aluminium Co. Ltd., at Rogerstone, Monmouthshire, were supplied by Pierhead Ltd.

Illustrated brochure containing Span and Load tables forwarded on request to Liverpool, Nottingham or London.

**HOVERINGHAM CONCRETE
CO. LTD.**

HOVERINGHAM NOTTS. TEL: BLEASBY 381-2-3



In the newly-decorated, self-service grocery, general provision and butchery store of West Butchers Ltd., High Street, Epsom, WARERITE wallboard is used extensively. Light mahogany Woodprint was chosen for exit foyer walls and cash desk surrounds. Decor by West Woodworkers Ltd. WARERITE wallboard distributor: George E. Gray Ltd., Ilford, Essex.

For attractive, hardwearing vertical surfaces choose *New* **WARERITE** wallboard

Wherever decorative vertical or ceiling surfaces must be moisture-resisting, durable and easily cleaned, new WARERITE wallboard is the obvious and economical choice. Counter fronts, partitions, cupboard fronts and flush doors are typical applications. WARERITE wallboard can be screwed or pinned, or fitted into extruded jointing sections.

WARERITE materials are supplied from stock in cities and towns throughout the country. Write for literature, samples and the name of your nearest distributor.

WARERITE wallboard

**IS IDEAL FOR VERTICAL
SURFACES AND CEILINGS**

- Wipes clean instantly • Easier construction at lower cost—no maintenance • Resistant to steam and moisture • Can be fixed with screws, or panel pins; cemented to wooden battens or fitted into frames • Standard boards 8 ft. x 4 ft. • Melamine-resin surfaced both sides

**WARERITE
wallboard**

with the lovelier patterns!



A product of BAKELITE LIMITED • 12-18 GROSVENOR GARDENS • LONDON SW1 • Telephone: SLOane 0898

TGA WW12R

Introducing . . .

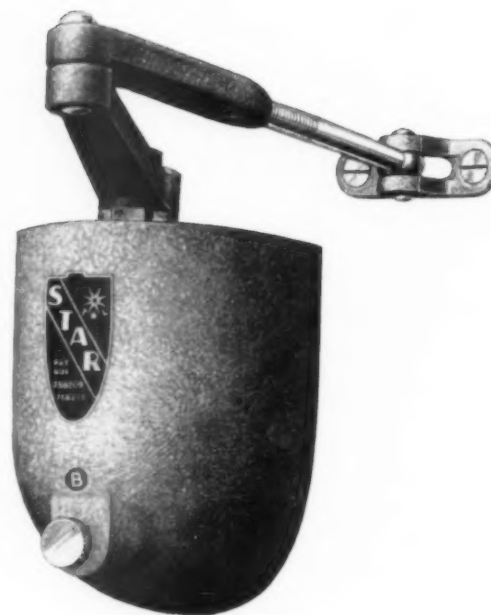


THE "STAR" PATENT OVERHEAD DOOR CLOSER

WITH HYDRAULIC CHECK ACTION

Patent Nos. 756209 and 756210

The "STAR" Door Closer embodies all the best known principles plus additional features. It is precision machined throughout and has been subjected to exhaustive tests in our works before being placed on the market. The standard model will suit light and medium inside doors up to 120 lb in weight and light outside doors, either left or right hand. Provision is made for adjustment of the spring tension (giving light, medium, or heavy tension) as well as for the speed of closing. Fixing is by means of a secret back-plate and the streamlined design of the body with its crackle gilt finish gives the closer an extremely attractive appearance. Other finishes are supplied according to requirements. Each closer is boxed complete with screws and a full size fixing template which provides accurate location.

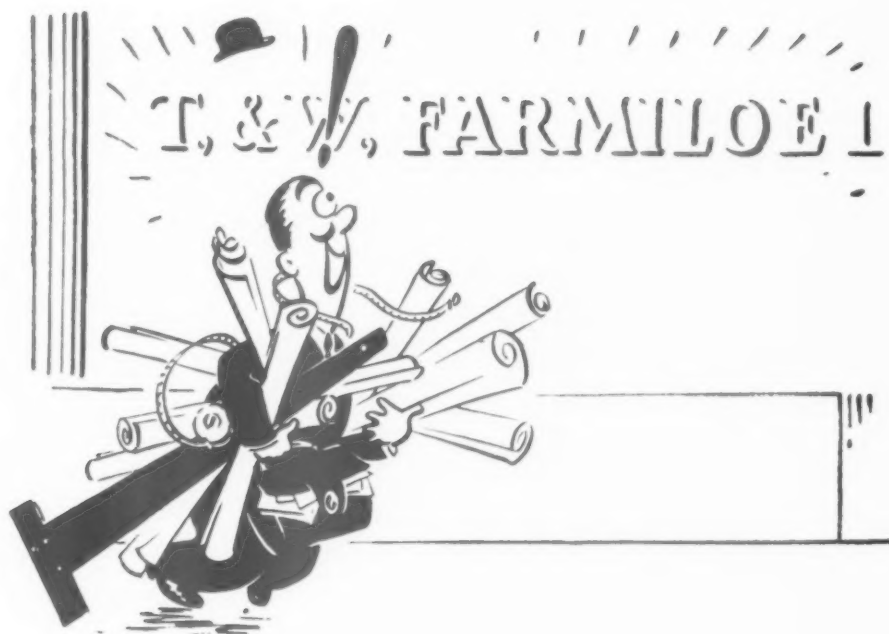


The "STAR" is made by the makers of the well known "DUPLO" and "SINGLO" Floor Springs

TONKS (BIRMINGHAM) LTD.

STAR WORKS, MOSELEY STREET
BIRMINGHAM 12

and is obtainable through the usual trade channels



*If you have
a Painting Problem
— bring it to **FARMILOES***

Your problem will be examined by an expert Technical Representative who will —

- visit and inspect the site to be painted
- discuss the whole job with a panel of specialist experts
- arrange, if necessary, for the Research Laboratory to produce special paints to cope with abnormal conditions
- present you with detailed specifications and Colour Schemes
- maintain liaison with the actual painters until the job is completed.

This Architectural Advisory Service is free of cost or obligation of any kind.

Write or telephone **THE MANAGER, Architectural Division,
T. & W. FARMILOE LTD.,**
Rochester Row, Westminster, S.W.1.—Tel: Victoria 4480

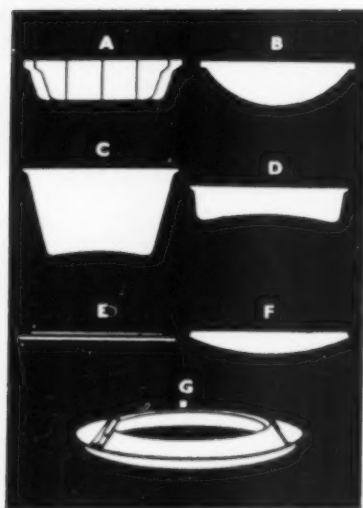
T. & W. FARMILOE LTD • ROCHESTER ROW • LONDON S.W.1

atlas leads in lighting / suggestions for store and showroom display lighting



H. H. Smith exhibit at the World Fair, Brussels—illustrating a typical use of Atlas display lighting.

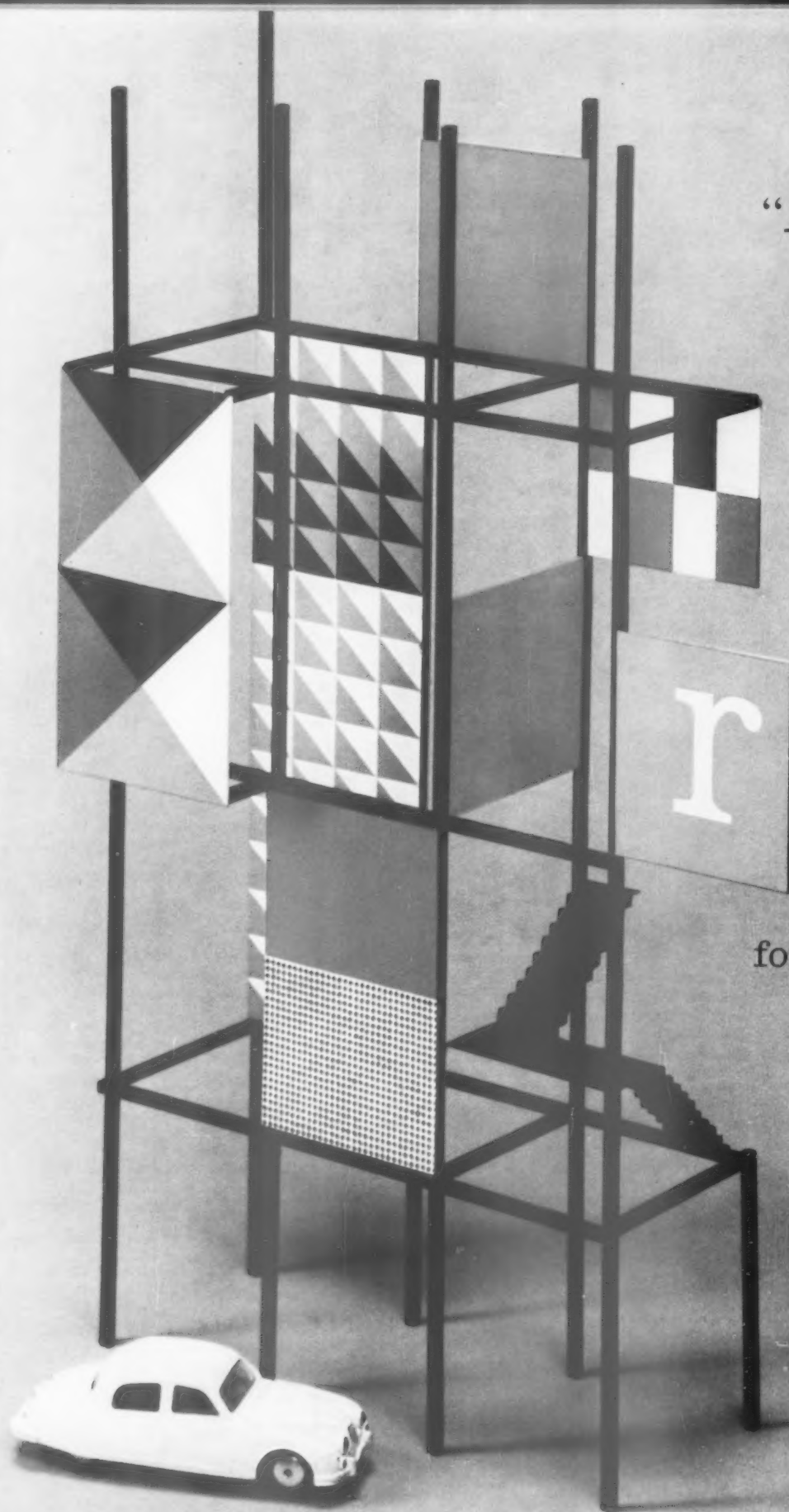
atlas display lighting



Successful display lighting requires, above all, flexibility within the lighting system. It is this quality which is a predominant feature of Atlas Display Lighting fittings. From four basic units and half a dozen attachments some fifty fittings can be assembled, suitable for surface or recessed mounting, with horizontal or vertical lamps, in ratings from 60 - 500 watts. A unique Soffit ring (g) clips into position hiding all fixing screws and carrying the attachments which include (a) a white metal louvre, (b) clear or pearl stepped lens, (c) deep and (d) shallow satin etched bowls, (e) a selection of Cinabex colour filters and (f) a glass 'festival' diffuser. A number of additional fittings designed for special display lighting jobs complete this range of fine quality Atlas fittings.

Atlas Lighting Engineers are available for consultation at any time, and will gladly call by appointment.

ATLAS LIGHTING LIMITED, A subsidiary company of Thorn Electrical Industries Limited, 255 Shaftesbury Avenue, London, W.C.2.



“Armourclad”

Glass

Cladding

for versatility

and richness

in pattern

and texture

Custom-made 'ARMOURCLAD' glass panels give new freedom to the architect and designer. For further information on the use of glass in cladding and curtain walls consult Pilkington Brothers Ltd., manufacturers of 'ARMOURCLAD' and 'MURGLASS'.

Pilkington
Brothers
Limited



ST. HELENS, LANC. (TEL: ST. HELENS 4001) OR SELWYN HOUSE, CLEVELAND ROW, ST. JAMES'S, LONDON, S.W.1 (TEL: WHITEHALL 5672-6)
SUPPLIES ARE AVAILABLE THROUGH THE USUAL TRADE CHANNELS. 'ARMOURCLAD' IS A REGISTERED TRADE MARK OF PILKINGTON BROTHERS LTD.



TIME TELLS *with...*

ASSOCIATION OF FLOORING CONTRACTORS, 69 CANNON STREET, LONDON, E.C.4. TEL.: CITY 4444



L.C.C. Architects Department

The sunken foyer, Royal Festival Hall

The DURABILITY of BRITISH HARDWOOD FLOORS



Nine million people have trodden this floor at least twice during the last six years. Wear during this period amounts to less than one-sixteenth of an inch. At this rate the life of the floor is about 50 years or the traffic of at least sixty million people.

No other type of floor can equal this for service, beauty or true economy.

Hardwood floors last a lifetime

THE HARDWOOD FLOORING MANUFACTURERS' ASSOCIATION, LONDON
15 NEW BRIDGE STREET, E.C.4. TEL: CITY 1476



ELDON STREET FLATS • BIRKENHEAD

LOCAL AUTHORITY
Birkenhead Borough Council
ARCHITECT TO LOCAL AUTHORITY
T. A. Brittain, F.R.I.B.A. B. Arch.
DEPUTY ARCHITECT
E. A. Cahill, A.R.I.B.A., A.M.T.P.I.
MAIN CONTRACTORS
William Thornton & Sons Ltd.
ARCHITECT TO MAIN CONTRACTORS
Donald Bradshaw, F.R.I.B.A.
SITE AGENT
E. Griffiths

240 Dwellings with under-floor heating insulated with

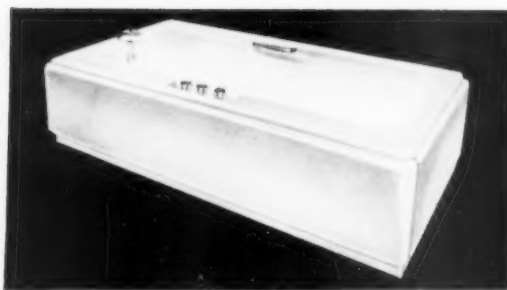
'J & B' MINERAL WOOL

JONES & BROADBENT LIMITED

Perren Street • London • N.W.5 • Telephone: GULLIVER 2120 • 5548

Now Allied Ironfounders present

THE ELYSIAN



The most elegant bath in the world

The Elysian bath was designed by an artist, with graceful lines that are a delight even to the most critical eye. Unusual panels are part of the reason for the Elysian's beauty; they are specially moulded to give the bath its smooth curves and bold streamlined shape.

Luxury fittings These include a combined supply inlet with built-in thermometer, a pop-up waste, and a stainless steel handgrip. Taps and the waste control are fitted in a recess in the front roll.

Luxury colours The choice includes black, white, ivory, grey, pink, blue, green, peony red, primrose, or turquoise. The panels can be supplied either to match or contrast with the rest of the bath.

Craftsman-built The Elysian is a cast iron bath with built-in soap shelf, porcelain enamelled inside and on roll. Panels are porcelain-enamelled cast iron. All exposed brasswork is chromium plated. Overall size is 76½" long x 34½" wide x 17½" high.

No extras The Elysian bath is supplied complete with taps and all fittings. It is prepared for 1½" overflow and 2" glass-enamelled trap under floor.

For further details of the Elysian bath, write to:

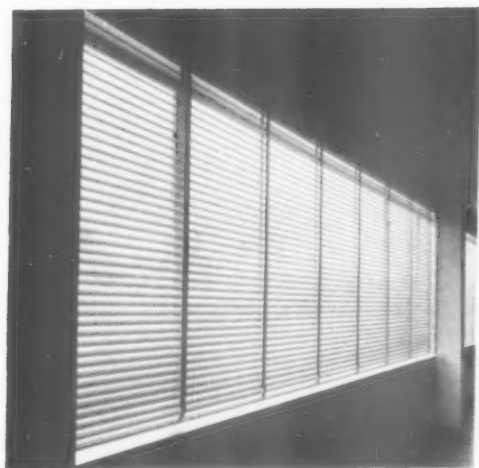
ALLIED IRONFOUNDERS LTD

Makers of cookers, boilers, fires and baths

28 Brook Street, London W.1



A new approach to the design and installation of Venetian Blinds



For far too long the many good points of venetian blinds have been overshadowed by unreliability and difficulties of installation. The Crittall Solomatic has been designed to solve these problems.

Its outstanding points are these:

- 1 *There are no cords to dangle, tangle or wear—one single control (single strap, double strap or gear) tilts the slats as well as raising or lowering the blind.*
- 2 *Uneven lowering is made impossible.*
- 3 *A double-cross web ladder tape prevents flutter.*

Every Solomatic blind is made to measure so that it belongs to the window—is not just a patchwork addition to it. Crittall are fully equipped to provide a complete planning and installation service for an entire building—new or old. Write for leaflet.

CRITTALL **Solomatic VENETIAN BLINDS**

—made to measure and made to last



THE CRITTALL MANUFACTURING COMPANY LIMITED • BRAINTREE • ESSEX • Branches and Depots throughout the country

Air filtration costs cut by 75%

Over-all efficiencies in excess of 99.5% are regularly attained with installations of FAR-AIR viscous impingement filters. Every detail of design for simple and speedy cleaning and replacement has been carefully worked out to save time and expense. These are the reasons why users of FAR-AIR equipment regularly report annual savings of 75% of their previous expenditure on air cleaning.



LEFT
4" thickness FAR-AIR viscous impingement filter panel

CENTRE
Circular FAR-AIR intake filter for reciprocating engines

RIGHT
2" thickness FAR-AIR viscous impingement filter panel

These filters are available from stock in a variety of standard dimensions

efficiency maintained by regular 'laundry' service

FAR-AIR filter maintenance centres are being established in various parts of Britain, to provide facilities for the regular collection, cleansing, re-oiling and return of filter panels. FAR-AIR filter maintenance plant and equipment is also available for large installations where the cost of this equipment is justified.

interpose an INTERMIT Far-Air filter

INTERMIT LIMITED
BRADFORD STREET, BIRMINGHAM 5 · PHONE: MIDLAND 7961

MEMBER OF THE



BIRFIELD GROUP

GYPROC overcame

the problem of noise in this

Staff Canteen with . . .



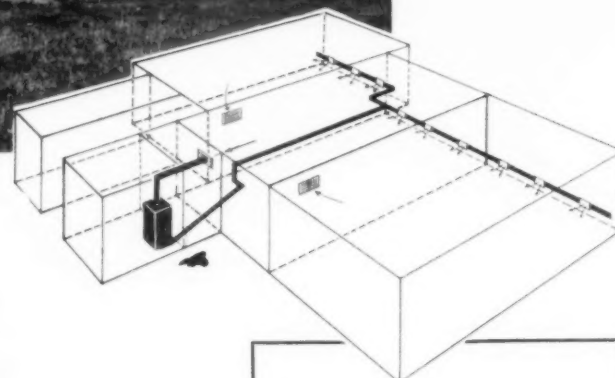
GYPROC SLOTTED ACOUSTIC TILES

These 2 ft. square, attractive bevel-edged tiles are high quality precision products. The slots which are the distinctive feature of the tile have been designed to provide optimum sound absorption when used with a suitable porous backing. As the tiles are manufactured from $\frac{1}{2}$ " thick gypsum plasterboard there is a high measure of fire protection. The tiles themselves present pleasant decorative elements. The slots and the 45° bevels on all face edges supplement a decorative scheme. All facts on sound absorption co-efficients, fire resisting characteristics, and methods of fixing, will be sent on request. Write for leaflet

Part of the Staff Canteen at the new Head Office of Messrs. George Wimpey & Co., Ltd. at Hammersmith for which more than 8000 Gyproc Slotted Acoustic Tiles were supplied. Architect: E. V. Collins, A.R.I.B.A., Chief Staff Architect.

GYPROC PRODUCTS LIMITED

Head Office: Singlewell Road, Gravesend, Kent. Gravesend 4251/4
Glasgow Office: Gyproc Wharf, Shieldhall, Glasgow S.W.1. Govan 2141/3
Midland Sales Office: 11 Musters Road, West Bridgford, Nottingham. Nottingham 82101
London Office: Bath House, 82 Piccadilly, London W.1. Grosvenor 4617/9 S/AG4



*The best of all modern
heating systems is
warm air heating—
by **Waterbury***

**It is more efficient
Running costs are low
Installation costs are low**

Waterbury heating can be applied to nearly all types of building, ranging from the factory to the house, from the school to the church, from the garage to the shop. Flexibility in installation is the keynote and high efficiency the rule. Low capital cost and fuel economy are combined with heating at its best. Gently moving filtered warm air quickly circulates to all parts obviating cold spots, banishing draughts and providing positive ventilation within minutes from starting. Sturdy construction, attractive appearance, long life and the latest oil and gas firing techniques are built into each Waterbury furnace.

Goffs Oak School, Hertfordshire
A Waterbury "Downflo" system
of heating is used in this new
school in Hertfordshire.

Architect: C. H. Aslin, C.B.E.,
P.P.R.I.B.A., County Architect,
Hertfordshire County Council.

Heating Engineers: Newman &
Watson Ltd., London.



The Waterbury "Downflo" oil-fired warm air furnace, utilised in conjunction with underfloor ducts, is smart, quiet and entirely automatic in operation.

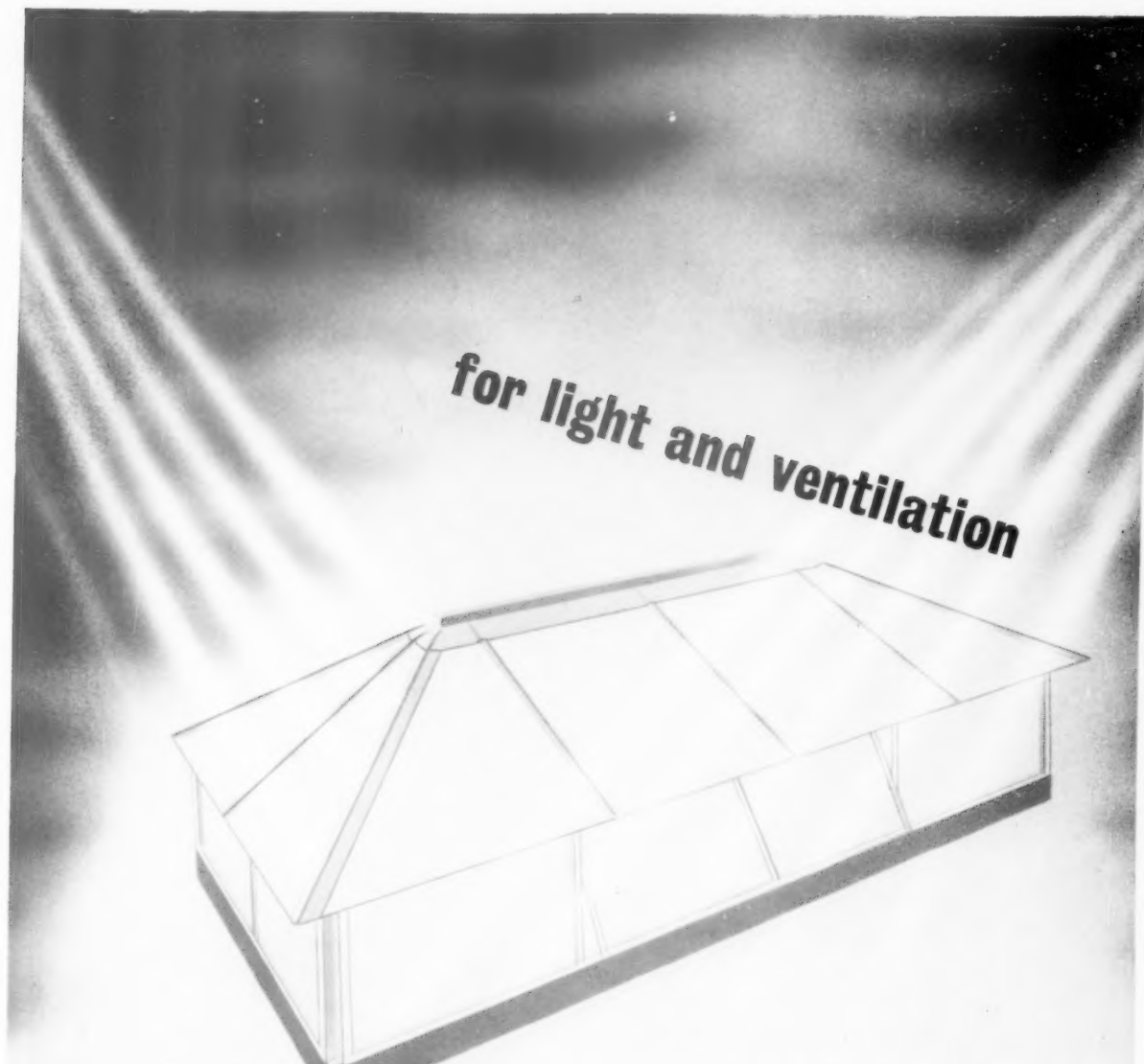
WATERBURY automatically means warm air




WATERBURY LIMITED

175/195 Stamford Brook Arches, Stamford Brook, W.6
Telephone: Riverside 5081. Telegrams/Cables: Watbury, London





for light and ventilation



These roof lights are normally constructed with 18" high upstands. Variations to this height can be made to client's specifications. Opening portions are arranged as requested. Write for technical catalogue ref. No. N.853.

HAYWARDS REFORM ROOF LIGHTS

HAYWARDS LIMITED UNION STREET LONDON S.E.1. PHONE WATERLOO 6035 (Private Branch Exchange)

ESTABLISHED IN 1783

5

Architectural Metalwork

by **MORRIS SINGER**



*National Union of General
& Municipal Workers,
4 Endsleigh Gardens,
London. W.C.1.*

*Architect.
Hubert Lidbetter,
F.R.I.B.A*



Balustrading to the ground floor area and first floor balconies, together with the gates to the goods entrance, are constructed from solid bronze sections in which the chevron pattern predominates. The main Cast Bronze Entrance Doors, designed by the Architect, have low relief panels modelled by C. Edmond Burton. These depict the original and new headquarters and the progress of the industries with which the Union is associated.

THE MORRIS SINGER COMPANY LTD.

FERRY LANE WORKS FOREST ROAD

WALTHAMSTOW E17 LARKSWOOD 1055



*Avenue Carbonisation and Chemical Plant, Chesterfield.
Contractors: Woodall-Duckham Construction Company Limited.*



Photograph by permission of Woodall-Duckham Construction Company Limited

Three and a half miles of Tiling in this Plant alone

Over 6,000 yards of tiling to the walls, floors and machine bases of this N.C.B. Carbonisation Plant in Chesterfield, as well as tiling for 26 other big Gas or Steel Works throughout the country, has been carried out by the firm of W. B. Simpson.

Simpson's—founded a hundred and twenty-five years ago—provide and lay high quality tiles and terrazzo mosaic for buildings of every kind. Their first-class service and superb workmanship are known and valued throughout the architectural profession and the building industry.



W. B. SIMPSON AND SONS LIMITED
ST. MARTIN'S HOUSE • 374 WANDSWORTH ROAD • S.W.8

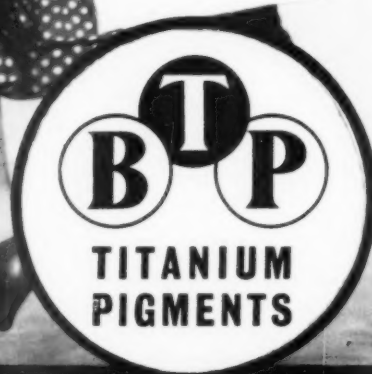
TILING • TERRAZZO • GLASS AND CERAMIC MOSAIC

*British Titan Products
brighten products*

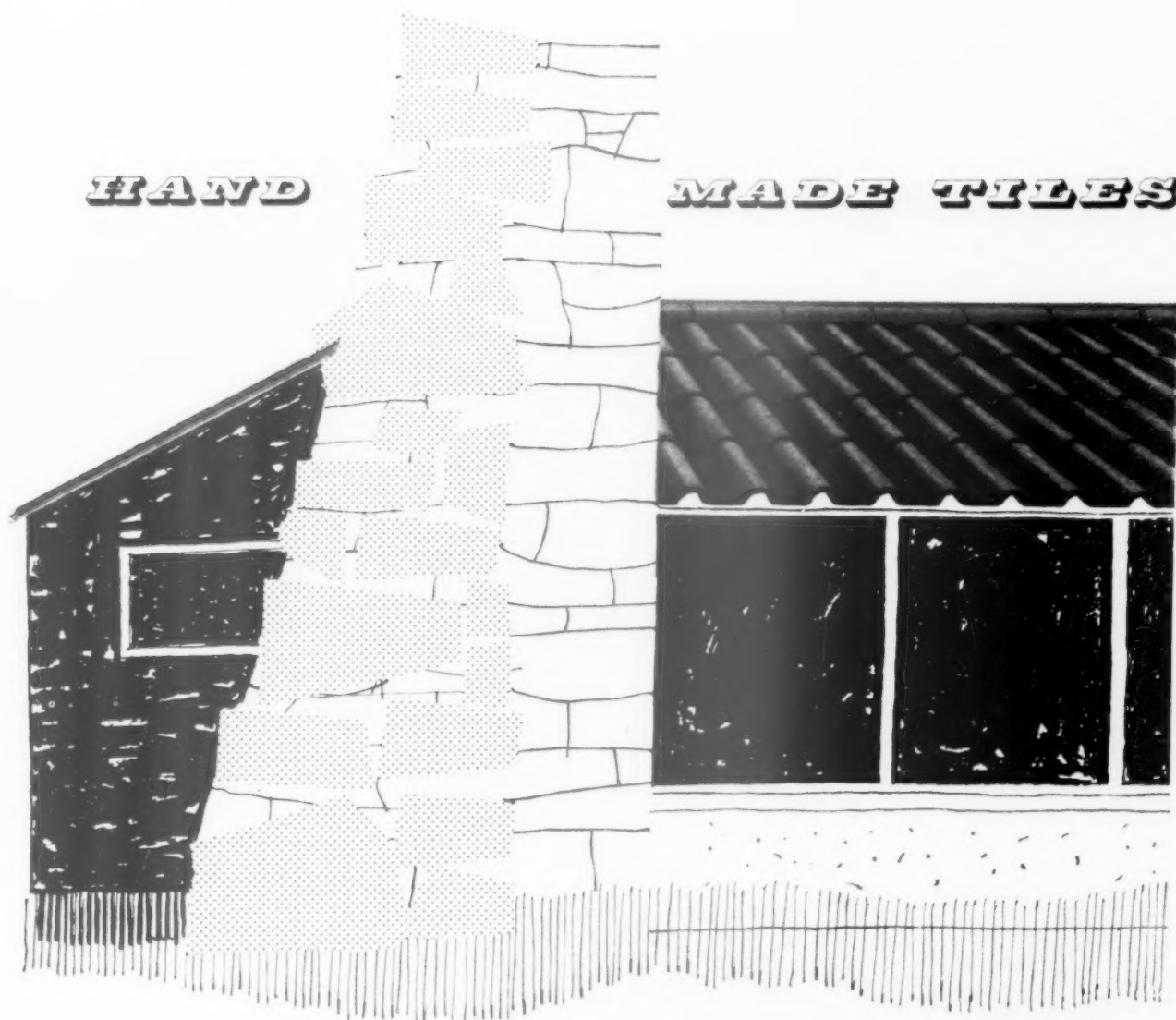
particularly PAINT...

**ALL
BRIGHT COLOURS
COME FROM WHITE!**

*TIOXIDE Titanium Oxide
is the finest white pigment in
the world for brightness,
hiding power and
long life*



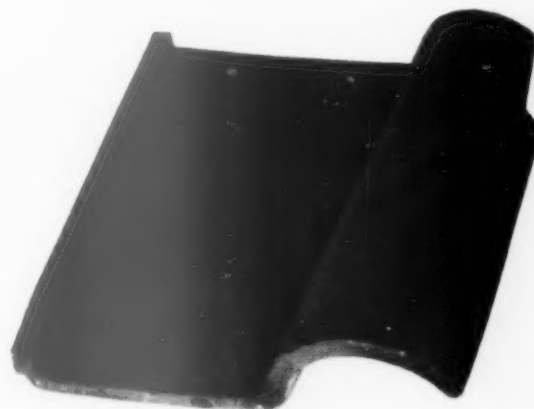
BRITISH TITAN PRODUCTS COMPANY LIMITED
10 Stratton Street London W.1



Made from the well-known Bridgwater non-ferrous clays, these tiles cost little to maintain, have a long life, and are, of course, traditionally famous for their fine appearance.

BAMBINO: An interlocking tile with exceptional weathering qualities.

Size $13\frac{1}{2}" \times 10\frac{1}{2}"$ (approx) 1,000 tiles cover 74 yards (approx).



COLTHURST SYMONS & CO LTD BRIDGWATER SOMERSET

'HOLLOSEAL'



Dual and multi-glazed units for thermal insulation

172 HEXAGONAL

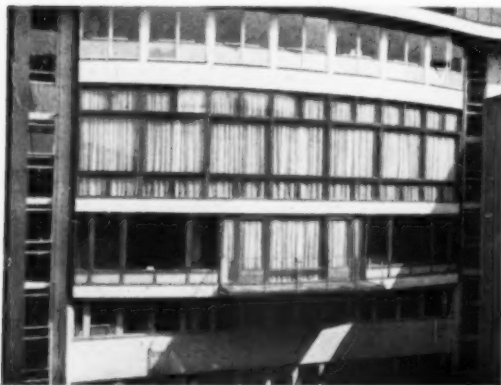
"HOLLOSEAL" DUAL GLAZED UNITS

The Conference Hall roof at a ground level in the Memorial courtyard is constructed of 172 hexagonal 'HOLLOSEAL' DUAL GLAZED UNITS. Each unit is hermetically sealed, consisting of two sheets of $\frac{1}{2}$ -in. Georgian Wired Cast Glass separated by a metal spacer and a sandwich of dehydrated air. For complete weatherproofing, each panel has a further covering of $\frac{1}{2}$ -in. Cast Plate Glass. These 'HOLLOSEAL' UNITS admit maximum light to the Conference Hall, ensure thermal insulation, reduce noise, and are quite free from condensation.



Two illustrations of the
Trades Union Congress
Memorial Building.

Architects:
David du R. Aberdeen & Partners
Main Contractors:
Sir Robert McAlpine & Sons Ltd.

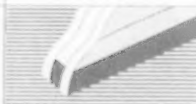


'HOLLOSEAL' DUAL GLAZED UNITS, the sizes being up to 87 in. x 80 in., in $\frac{1}{2}$ -in. polished plate with $\frac{1}{2}$ -in. cavity, are glazed on the fourth and fifth floors overlooking the courtyard, enabling the maximum admission of natural light, providing clear and unobstructed vision, with the maximum conservation of internal temperatures.

★ Write for fully descriptive technical literature, or seek information from our experienced advisory service.



"HOLLOSEAL"
Clear Glazing Units



"FIBRESEAL"
Light Diffusing Glazed Units



"COLOURSEAL"
Wall Cladding Units



THE HOLLOW SEAL GLASS CO., LTD.
HEAD OFFICE: Glass Works, Stamford Road, London, N.1
TELEPHONE: CLISSOLD 1121 (P.B.X.)



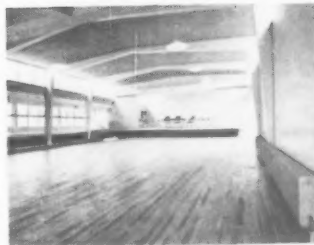
Everybody Knows a Stelrad



BY ALLAH!

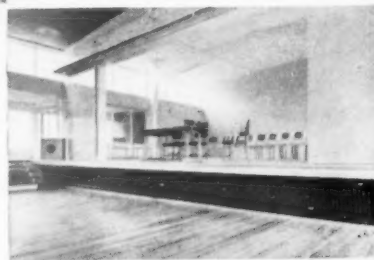
**YOU SEE THESE
STELRADS
EVERYWHERE**

Sharp and rapid changes of temperature are characteristic of the Middle East, where the nights can be very, very cold. Here, as in other places where even, easily controlled warmth is needed, STELRADS automatically fill the bill. At home in Britain, too, architects specify STELRADS for buildings of all kinds. These three pictures show typical STELRAD installations. Widely divergent in type, these installations are but a few of the many possible arrangements.



1. Column Radiators at Mallory Comprehensive School, London County Council. Heating Engineers: Matthew Hall & Co. Ltd.

2 & 3. Wall and column type radiators for the Wincanton Secondary Modern School, Somerset County Council. Heating Engineer: E. R. Carter, A.M.I.H.V.E., Yeovil.



**STEEL RADIATORS
LIMITED**

BRIDGE ROAD, SOUTHALL, MIDDX. Telephone: Southall 2603



*The new Duke of York,
Newcastle, Staffs.*

*Architects:
Forshaw, Massey & Greaves, Newcastle*

RICHARDS
DUROFROST
CERAMIC TILES FOR EXTERIOR USE

Tested under most severe conditions for frost resistance

IN SIZE 6"×6"× $\frac{1}{2}$ " WITH LOCK HOLES IN BACK FOR SAFE FIXING

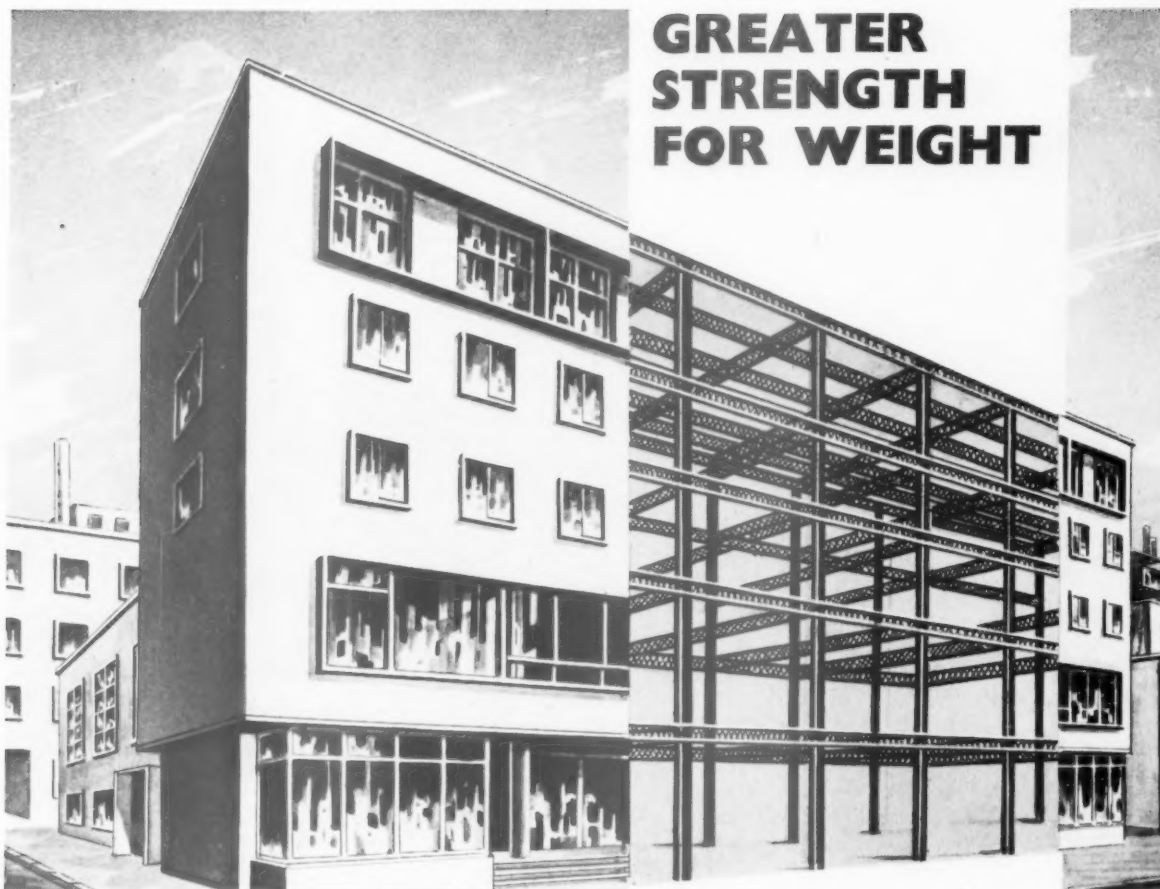
Available in pastel colours—plain or decorated

SAMPLES ON REQUEST

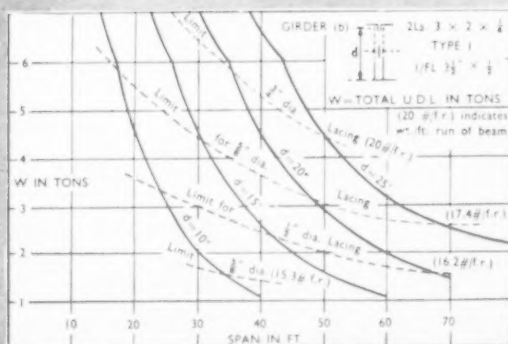
RICHARDS TILES LTD

Factories:
Tunstall, Stoke-on-Trent
(S-O-T. 87215)

London Office and Showrooms:
Grand Buildings, Trafalgar Square, W.C.2
(Whitehall 2488 & 8063)



GREATER STRENGTH FOR WEIGHT



Designed to BS 449 1948. Approved by
Government Departments

HEYCON

LATTICE GIRDERS

(PATENTED)

the pattern for modern construction

HEYMAN CONSTRUCTIONS LTD

124 VICTORIA STREET LONDON S.W.1

Phone: VICtoria 6262 & 9351

on flat roofed single or multi-storied buildings

Light but immensely strong, the patented lattice construction of Heycon Girders gives a far higher strength weight ratio than conventional steelwork, and is ideal for long-span roof beams. **Heycon Lattice Girders are time saving too.** They can reduce erection costs by as much as 33 1/3%! Simple two-bolt fixing speeds assembly, and all welded jig construction achieves consistent accuracy, making possible a far greater degree of perfection for both large and small projects.



The Heycon Technical Service will provide, free of costs or obligation, a full assessment of the savings Heycon Lattice Girders can effect in your construction project. Why not consult us? Write to:—

DAWNAYS STEELWORK

Specialists in the design
fabrication and erection of riveted
and welded steel-framed structures
of every description



DAWNAYS LIMITED
BRIDGE & STRUCTURAL ENGINEERS

STEELWORKS RD., BATTERSEA, LONDON, S.W.11.

Telephone: BATTERSEA 2525 (10 lines)

ALSO AT: SWANSEA • CARDIFF • WELWYN GARDEN CITY • NORWICH • HULL
SOUTHAMPTON • PETERBOROUGH • ROMFORD • VICTORIA STREET, S.W.1

G.E.C. LIGHTING WITH LUMENATED CEILINGS



APPEARANCE IS ONLY HALF THE STORY

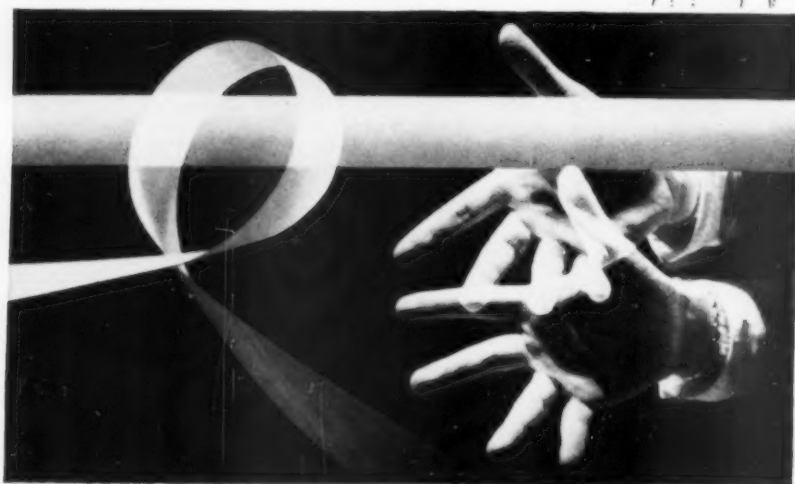
- G.E.C. lighting with Lumenated ceilings combine to provide even light distribution without glare.
- G.E.C. high efficiency control gear and Osram guaranteed fluorescent tubes are the essential components for every Lumenated ceiling.
- Before planning your next installation consult the G.E.C. Illuminating Engineering Division at your nearest branch.



The Reality of a Complete Lighting Service

THE GENERAL ELECTRIC CO. LTD • MAGNET HOUSE • KINGSWAY • LONDON • W.C.2

Isn't this the limit?



Bend a Luxaflex Thermofort slat any way you like. Bend it to the limit. As soon as you let it go it will snap back perfectly straight—no deformation no damage!

Owing to an exclusive new tempering process, Luxaflex Thermofort slats can be bent and twisted again and again—yet they always snap back and retain their shape. This is just one of the reasons why Architects in 65 countries specify Luxaflex aluminium blinds as a matter of course.

All the components of a Luxaflex venetian blind are made in the same factory to specifications resulting from years of research and practical testing. Thus each blind is technically perfect and will give years of trouble-free service.

LUXAFLEX ALUMINIUM VENETIAN BLINDS

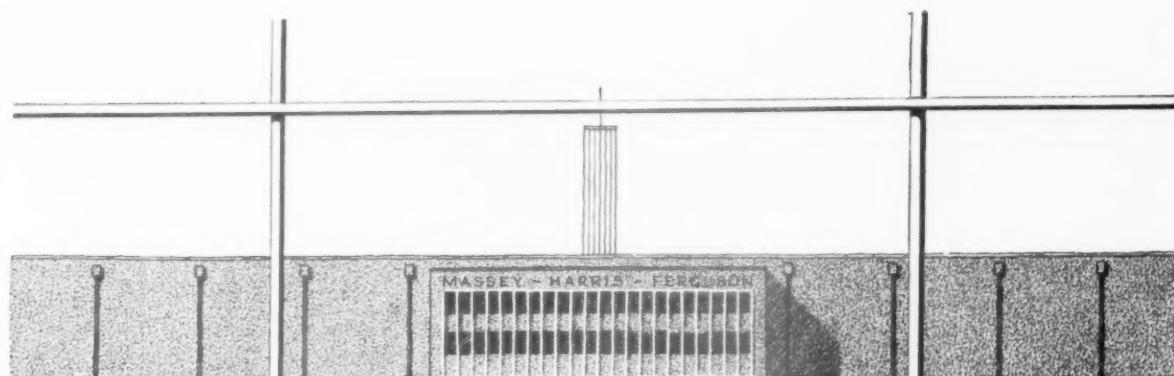
Luxaflex
REGISTERED TRADE-MARK

with Luxaflex Thermofort slats

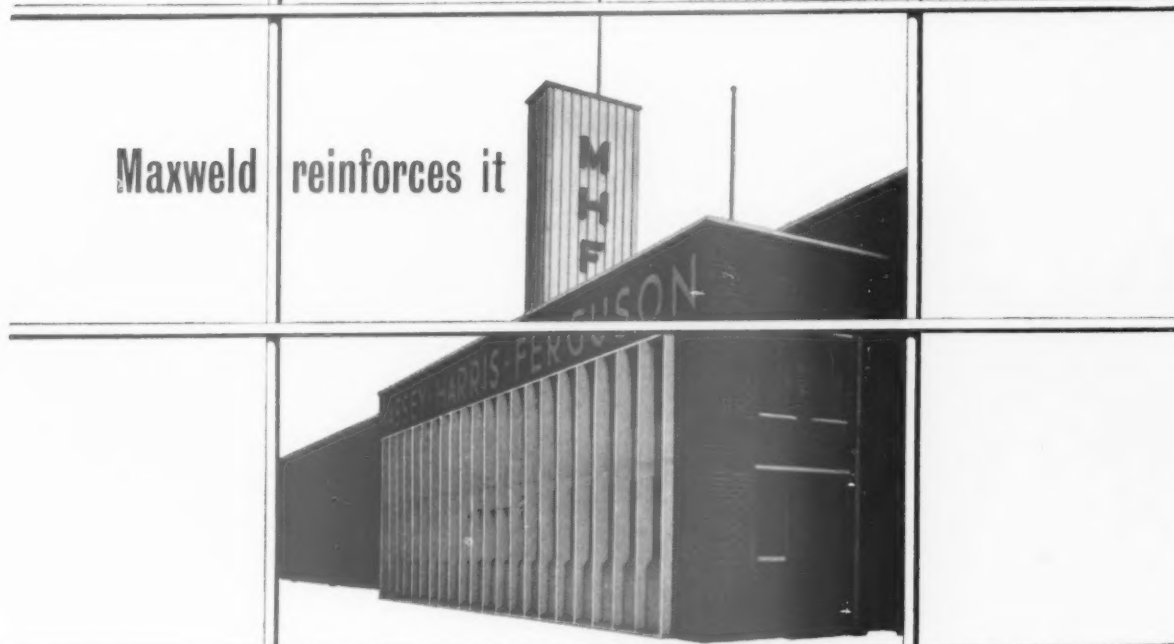
TEST IT FOR YOURSELF!

We shall be pleased to send you a free test slat, brochure and technical data. Write to the address below :-

HUNTER DOUGLAS (GREAT BRITAIN) LTD., 162 BROMPTON ROAD, LONDON, S.W.3. KNIGHTSBRIDGE 4488



Maxweld reinforces it



The reinforcement fabric used in the Massey-Harris Ferguson factory at Stretford was supplied by Richard Hill. Do you need reinforcements? Then call up the Maxweld man! He can give you all the facts on the type and quantity of fabric you'll need plus a rough idea of the cost. And he's backed by the

Richard Hill Design Service

who can then draw up more detailed plans and estimates. You can get him at Middlesbrough (2206), London (Mayfair 3538), Birmingham (Mid. 5625), Manchester (Central 1652), Leeds (2-7540), Bristol (24977), Glasgow (Central 2179), Nottingham (Bulwell 27-8383), Bournemouth (Westbourne 63491), Belfast (29126).

Maxweld fabric

is manufactured by **RICHARD HILL LIMITED** (Established 1868)
Newport Wire and Rolling Mills, Middlesbrough, Yorkshire. Tel : Middlesbrough 2206

A MEMBER OF THE FIRTH CLEVELAND GROUP



CRC 9MX



[Photograph by Colliers (Dover St.) Ltd.]

COMBINED OPERATION

The Victorian wheeze for the combined operation of keeping both the chest and the knees warm with one all embracing garment looks odd to many twentieth century eyes. All the same, there is something to be said for good thermal insulation whether it be of bodies or buildings. We in A.C.C. fancy we know a thing or two about the best ways of thermally insulating a building and if it's a combined operation for thermal insulation, suspended ceilings, office partitions and a new decor for the board room, then it's just our cup of tea.

ANDERSON CONSTRUCTION COMPANY LTD.

CLIFTON HOUSE, EUSTON RD., LONDON, N.W.1. EUSTon 7465



The Demolition & Construction Co. Ltd.

LONDON · CARDIFF · LIVERPOOL · NEWCASTLE-ON-TYNE



CLAY PRODUCTS TECHNICAL BUREAU · DRAYTON HOUSE 30 GORDON STREET LONDON WC1

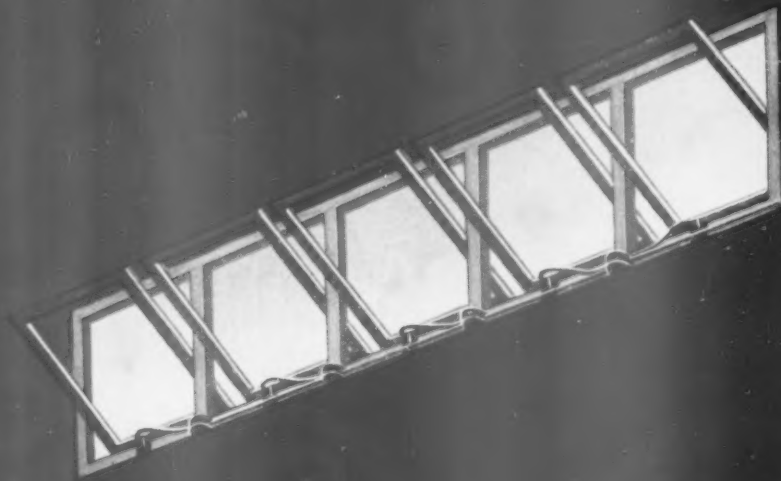


specify ceramic glazed

fireclay

sanitary ware

in restaurants, cafes, hotels,
where hygiene is vital,
where replacements can cause
costly disorganisation,
where strength, durability and
utility really matter.
With glazed fireclay, first cost
is last cost.



Teleflex





Something's changing the face of Britain

giving a lift
to the looks and the life
of new projects
and conversions
all over the country

First plastic emulsion paint suitable
for outside use, Pammastic vastly increases the
potentialities of exterior colour in architecture. For pointing good features and disguising
the bad, for achieving new effect of proportion and uniquely interesting colour schemes,
Pammastic's range of 25 intermixable colours is an unexcelled design medium.

NO COMPLICATIONS

Pammastic is probably the simplest kind of wall paint ever devised. No undercoat or primer; will not peel or flake; for use on brick, plaster, stucco, cement, concrete, pebbledash, asbestos and cement paint—provided the surface is sound. Perfect, in fact, for *outside* as well as inside uses.

TROPICALLY TESTED

Pammastic has proved it remains unaffected by humidity, rain or industrial fumes. It is distinguished for its low dirt retention, great adhesion and fastness to light. Its effective life is far longer than that of conventional outside wall paints. Over the years, it is certainly the most economical kind of exterior wall paint.

PAMMASTIC

the world's best Emulsion Paint

Further information from: Blundell, Spence & Co. Ltd., 37 Queen Square, London, W.C.1

MARGINALIA

New Look in Crucks

Now that architects have largely given up assuming—subconsciously, no doubt—that reasonable architecture must be rectangular, the way has been open for some time to a revival of that most reasonable of house-structures, the cruck, a pitched roof standing directly on the floor without intermediate walls. A neat realization of the possibilities of this house-form that probably

murdo. The Morris Collection now has nearly a thousand items, among them 43 cartoons for stained glass, five original designs for chintzes and three for wall-papers, large numbers of printed textiles, woven textiles, wallpapers and tiles, 11 original carpets, many pieces of embroidery, the Woodpecker Tapestry and much book work. Two pieces of furniture are specially interesting: a cabinet designed about 1865 by



1

Work.



2

Work.

goes back to the Germanic invasions of Europe, is provided by the *Trigon*, a mass-producible holiday cottage designed by the Swiss architects, Heidi and Peter Wenger. 1. The foldaway verandah, seen here in the process of being lowered, provides weather-proofing for the all-glass end wall when pulled up hard, 2, into the gable.

William Morris Gallery

The William Morris Gallery at Walthamstow is housed in the mansion, then in a country setting, into which the Morris family moved when young William was in his fifteenth year. The family moved away in 1856, when he had just come of age. The Gallery began with generous bequests from Frank Brangwyn and Arthur H. Mack-

1, holiday cottage with balcony half lowered.
2, the closed balcony protects the window-wall.

Philip Webb and provided with painted panels by de Morgan and a settle probably designed by Mackmurdo's Century Guild but sold in 1893 by Morris & Co. The collection of letters is impressive. They start in 1848 and include about 70 to Morris's mother, 60 to Bruce Glasier and 10 to Morris's early partner, Charles Faulkner. Visitors to the Gallery may also be interested in a helmet designed by Morris in 1857, one of the two candlesticks from Morris's desk and a cloak and gown designed by him for Jane Burden before she became his wife. The catalogue of the Morris Collection published a few months ago is admirably informative. It should be on the shelves of Morrisites regardless of past or future visits to Walthamstow.

The Art of Reissuing, VII

The last important work by the grand master of modern art-historical studies—Heinrich Wölfflin—published at an unpropitious time, 1931, has had to wait twenty-seven years for an English translation. It appears now under a title *The Sense of Form in Art* that is somewhat misleading,

though doubtless its new American publishers* feel that the original title *Italian and das Deutsche Formgefühl* is a little too provincial for an English-speaking public. The contents, however, remain the same—a study of German art in collision with the classical south, that may well be of interest to English architectural readers because of the oblique light it casts on what might be called the 'operational prejudice' that triggered and permeated Geoffrey Scott's *Architecture of Humanism*. It is eternally to be regretted that this book which is so pre-occupied with problems of formal clarity should, at its first English appearance, be illustrated by half-tones so double-screened that they look like appliqué pictures in tweed, but this was probably unavoidable on grounds of cost.

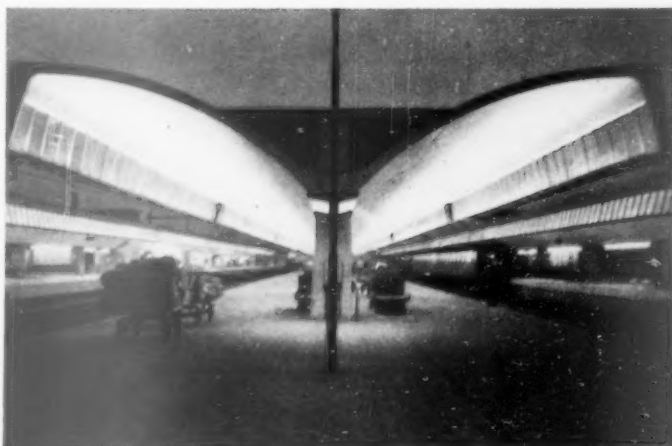
*Chelsea Press, New York; \$6.50.

Two Views of the Centraal

The new central station in Rotterdam has been much argued over; its timid façade seems to be generally disliked, but there is a fair body of opinion in favour of the platform canopies. These ingenious, bold, back-braced vaults, 4, though as much the work of the Dutch Railways architect van Ravesteyn as the front, create quite a different effect and, in particular, the glare-free lighting of the undersides at night is a remarkable achievement. If, however, the voyager goes a little further along the platform and looks back, he may feel inclined to change his mind, for the canopies are now seen, 3, in competition not only with the slightly eccentric style of van Ravesteyn's ancillary buildings, but also with the surprisingly rugged gantries that support the overhead wireframe inevitably associated with pantograph electrification.



3



3, Centraal Station, Rotterdam, from the end of the platform and, 4, from inside, showing the lighting of the underside of the canopy.

Ancient and Industrial

The 1957 report of The Ancient Monuments Boards for England, Scotland and Wales* is the first to draw attention to the problem of what it calls Early Industrial Monuments. Its approach is cautious and apologetic, observing that 'it may seem strange to some that such things as a blast furnace or an iron works should be considered as historical monuments at all' and reprinting the relevant clauses of the Act of 1931 to show that they can be



5, remains of the original blast furnace near Sandvick.

stretched to cover early industrial buildings. Apart from these necessary psychological adjustments, however, there appear to be two real difficulties with the conservation of industrial monuments: firstly that money, as always, is short; secondly, the provisions of the Act cannot easily be stretched to cover 'movable chattels' which, in this case would include machinery, and—clearly—there would be little sense in many cases in scheduling or preserving the structure without the plant it was intended to house.

In spite of all this, it is still disappointing in the extreme to discover that 'no monument of this kind has been taken into guardianship' (an appalling state of affairs in a country that pioneered the Industrial Revolution), that only six have been scheduled at all, and that only another six are on the Science Museum's list as needing and meriting protection. In view of the rapid obsolescence of industrial plant, and the inevitable economic pressure for its replacement even in the earliest days of the Machine Age, the chances are that there are already fewer pioneer industrial buildings in need of protection than Norman Abbeys. The Ministry of Works would not, in all

* H.M.S.O., 1s.

4

International Lighting Review.

probability, be assuming an unmanageable extra load if it brought at least some of the six monuments already scheduled into guardianship—in one case the need for a positive protection policy is urgent; the condition of the Ironbridge in Coalbrookdale has become very slummy and much of its smaller detailing is breaking off. A salutary contrast is provided by the Goransson blast-furnace, 5, near Sandviken in Sweden, site of the first successful use of the Bessemer process; though no longer in use, it appears, at its centenary, to be honoured with the kind of upkeep it deserves.

CORRESPONDENCE

Irish Vernacular

To the Editors,

Sirs,—There is a tradition in Northern Ireland of painting false quoins on the corners of buildings, but one does not often see this attempted on a corrugated iron weekend cottage. This example at The Temple, Co. Down, was carried out by a skilful housewife.

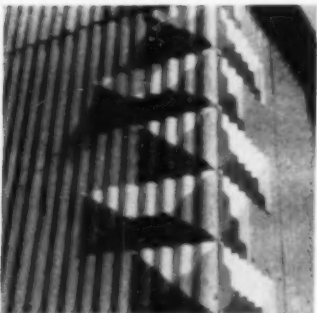
Yours, etc.,

G. PHILIP BELL,

Belfast, N. Ireland.



6



7

6, 7, general view and detail of false quoins painted on corrugated iron.

Oxford Restoration

To the Editors

Sirs,—Oxford is asking for a million to restore its buildings from the ravages of time and gases. Even if they get the money, they will likely find it impossible to get masons and masons' tools to do the work. I have had over twenty years' experience in working in many Oxford masons' yards, and I have watched the supplanting of the axe—and the bolster (or big chisel) for surfacing stone by the big corundum saw which leaves a dead smooth surface—and the usual alternative to this dead surface is cement, artificially rubbed down with bricks of emery, and I am assured by old and

experienced masons that the chiselled surface is much more resistant to erosion, etc., than the sawn smoothness. I carved a good deal of bestiary and decorative work on a 'gothic' library at Bryn Mawr Pennsylvania in 1910. In 1940 I was asked to do some more as the building had been greatly extended. So I went to do so—and found that the new building had been wholly, i.e. each stone, 'detailed' in the architects' office in Philadelphia, then mechanically sawn—like children's bricks—into thousands of stones—in Bedford, Indiana (about a thousand miles away!) and that these stones were finally assembled at Bryn Mawr by men who were not masons and had no knowledge of masons' tools or work, and the building looked like it!

This decline in the knowledge and appreciation of stone-working is largely due to a deplorable development in English sculpture which can be said to have begun after the French debacle of 1870. Dalou came from France to London and taught sculpture, and later one of his assistants, Edouard Lanteri became Professor of Sculpture at the Royal College and in the '80's-'90's and early 1900's, for thirty and more years taught a whole generation that sculpture was just the art of making clay models. This made a whole race of men who never saw a chisel or thought of carving as a part of their job. Malvina Hoffman wrote c. 1920–30 a big comprehensive book on sculpture; herself an accomplished sculptor, and with unique technical equipment and skill—she therein describes every stage in the processes of sculpture and traces its details from clay softening to bronze casting of every kind. The one process of sculpture she does not describe is to take a block of stone or wood and directly cut it into a conceived shape. That simple process was beyond her range and comprehension! Another factor in the situation was the overwhelming influence of Rodin. His complete abandonment of any sense of carving (in his marbles) led everyone astray and so the simple process of carving without a clay or plastic model was almost entirely forgotten, and abandoned. Yet it is integral to the practice of sculpture, and to the understanding and interpretation of historic sculpture. Rodin and Lanteri together did irreparable harm to the practice of stone carving for they made it a reproductive and copying process instead of a creative one.

Please forgive, if I have written too long. More than fifty-six years ago I joined C. R. Ashbee's Guild at Campden, I have spent the years in carving wood, stone, marble, etc.; thereby learning all about the technical processes of sculpture as met in workshops and masons' yards, wherein is pooled knowledge and skill, which, properly directed, should be of the greatest service. I am of course aware of the small group—including some great names—which has in the last thirty years returned to an appreciation of stone and staged an apotheosis of stone. The admiration of this group for stone as stone—especially wind- and weather-eroded stone—has led to some work wholly new and worthy. But I still think that the forms of the sculpture carved by the members of this group do not derive from their sense of the material but are mental concepts adapted to one or other material. My plea is for simple and less sophisticated skill.

Yours, etc.,

ALEC MILLER.

Santa Barbara, California.

A Liturgical Brief

To the Editors.

Sirs,—Mies van der Rohe in the foreword to a publication of the work of Rudolf Schwarz calls him 'the great German church architect and one of the deepest thinkers of our time.' The following is an excerpt of what Schwarz writes in the May issue of *Werk und Zeit*. I feel sure readers of the Rev. Peter Hammond's article will be interested in it.

'I am getting more and more convinced that the modest serving of the liturgical action is not enough to fulfil the task of the church architect. One has to add something, one has to add poetry. Liturgy cannot offer sufficient instructions for the building of churches, partly because liturgy is action, while building is static, and also because architecture steps out into the cosmic and only by that becomes true church architecture. I once asked a professor of architectural history whether he knew any church which could be explained for what it is solely from liturgy, and he told me that such a building does not exist anywhere in the world. The real foundations of church architecture are great and eminently real cosmic images which can be modest or of the highest majesty but which are always entirely simple. Liturgy has to be given its place within them. All this is a truism. Every architect who starts designing a church knows after the first quarter of an hour that liturgy does not tell him how to do it. As a rule, however, when he has noticed that, he turns to the journals to which he subscribes rather than to the guidance which inner images could give him.'

Yours, etc.,

NIKOLAUS PEVSNER.

London.

Architect of Studio House at Seattle

Robert Reichert is a graduate of the University of Minnesota, and later studied at Harvard with Walter Gropius. Before going into private practice four years ago he worked in Boston, Minneapolis and Seattle, and he has taught design at the University of Washington for four years. He is also a member of the American Guild of Organists.



Flatted Factories at Birmingham

The office of Mr. A. G. Sheppard Fidler, the City Architect, was closely associated with the design of the factories illustrated in Current Architecture in July.

Belgrade Theatre, Coventry

Bernard Schottlander designed the light fittings in the Belgrade Theatre, illustrated in July.

CORRECTION

Our apologies are due to Editions Girsberger of Zurich for a statement in *Marginalia* for July 1958, that *International Asbestos Cement Review* was published on behalf of the Eternit Company. This is not so; the Review is an independent publication, enjoying the support of a number of Asbestos manufacturers in different countries (in England, Turners Asbestos Cement Co.).

INTELLIGENCE

The winners of the competition for the redevelopment of the centre of Berlin were the team of Friedrich Spengelin, Fritz Eggeling and Gerd Pempelfort. The second prize was divided between Hartmann and Nickerl, and Hans Scharoun in collaboration with Wils Ebert. The third prize was also split, into three parts, one of which went to the English team of Alison and Peter Smithson in association with Peter Sigmund-Wonke. This was the only prize awarded to non-German architects, though three of the four non-premiated schemes purchased for the city of Berlin came from foreign designers.

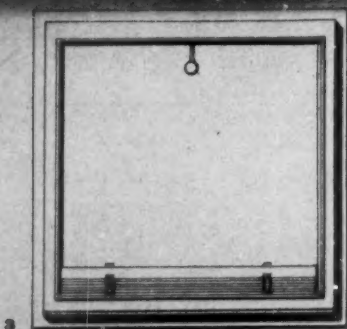
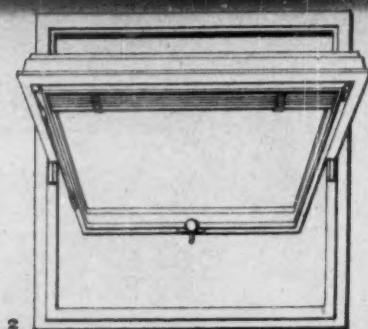
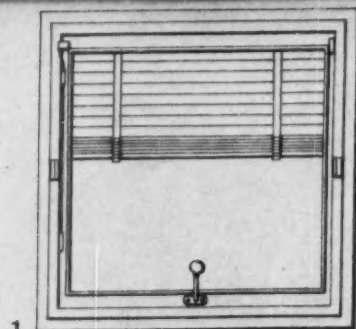
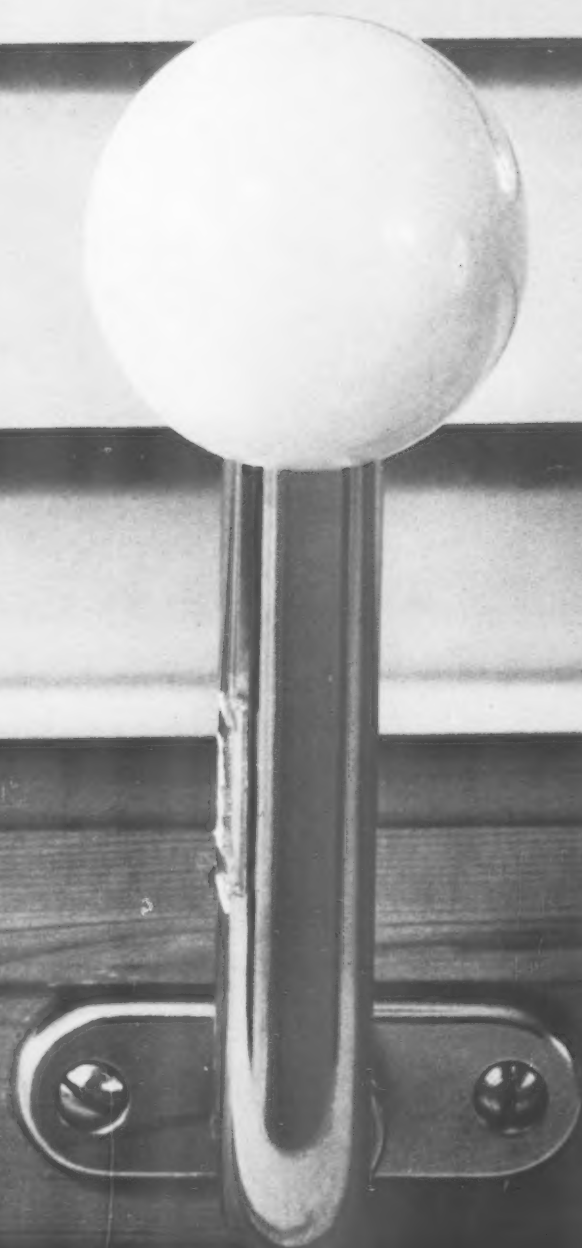
The Pope has designated Saint Benedict as the patron saint of Italian architects and engineers.

Mr. John Gloag has been awarded the Bicentenary Medal of the Royal Society of Arts for 1958.

Paul Nelson, designer of the Hospital at St. Lo, France, has joined the NY firm of Ketchum and Sharp.

ACKNOWLEDGMENTS

COVER: Eric de Maré. FLATS AT HAM, pages 218–225: Frontis, Brian Housden; 2–12, 14, James Stirling; 13, 15, Michael Wickham; 16, 17, Toomey Arphot. RURAL HOUSING, pages 226–236: 1, 4, 5, 12, 16, Taylor and Green; remainder, Nairn Arphot. CAPPADOCIA, pages 237–239: 1, 3, Donat; 7, Council of Industrial Design. STUDIO HOUSE AT SEATTLE, pages 240–242: Chas. R. Pearson. CINEMA NEAR ROME, pages 243–246: Foto A. Carioni. KIRKLEATHAM, pages 247–250: Frontis, Herbert Felton; 1, Ashmolean Museum of Fine Art. INTERIOR DESIGN, pages 251–255: 1–4, Galwey Arphot; 5, 6, John Maltby; 7–9, Herbert Nolan Arphot. DESIGN REVIEW, pages 256–257: 1–4, J. Wuidart. MAUSOLEUM AT KABACHI, pages 258–260: Frontis top, Alfred Cracknell; Frontis centre and page 260, Michael Boys. CURRENT ARCHITECTURE, pages 261–264: 1, Stewart Bale Ltd.; 2, 3, Carbonara Ltd.; 5–7, Northern Aluminium Co. Ltd.; 8, 10, R. Geoffrey Cardew; 9, Douglas Whittaker; 11, Richard Einzig; 12, E. A. Meyer. MISCELLANY, pages 265–271: Exhibitions, 2, Gerald Howson; 3, Arts Council of Great Britain; 4, Gimpel Fils Gallery Ltd.; 5, Liddbrooke. Counter Attack, Nairn Arphot. The Industry, pages 274–278: 2, Scott-Turner and Associates Ltd.; 5, Deighton Wilkes and Co. Ltd.



The CARDA window is the result of careful research coupled with fine craftsmanship.


The double-glazed, pivoted sash provides excellent sound and thermal insulation, while a venetian blind between the panes eliminates glare and keeps rooms cool in warm weather.

From the fully closed position, 1, (shown here with the blind partly lowered) the window can be pivoted on friction pivots through 30 degrees for normal ventilation, 2, and rotated completely through 180 degrees for cleaning from the inside, 3.



HOLCON LIMITED

21 Mackenzie Street
Slough Buckinghamshire
Telephones Slough 25431, 2



SPECIALIST WEAVERS FOR
PARTICULAR ARCHITECTS



EDINBURGH
WEAVERS
102 MOUNT ST
LONDON W1

◀◀ WHISPERING BAMBOO ▶▶ A TAPESTRY WEAVE

THE ARCHITECTURAL REVIEW

Volume 124 Number 744 October 1958



The Cover shows the statue of Inigo Jones by Rysbrack that stands in front of one of the spur walls of restored Chiswick House—a compliment paid by one Palladian, Lord Burlington, to his great predecessor, at a site that has since become the heart-shrine of English Palladianism. The restoration of Chiswick House, and the installation in its basement of an exhibition that includes Lord Burlington's original drawings for it, is a fitting consummation to that revaluation of Lord Burlington and the English School of Palladianism, that has been proceeding for the last decade under the inspiration of Professor Wittkower, whose life of Burlington is due for publication in the near future.

211 Marginalia

214 Frontispiece

215 Exploding Metropolis: The Editors
The melancholy credit of having invented senseless, leap-frogging urban sprawl should probably go to London in the nineteen-twenties, but its development into a catastrophic symptom of a disintegrating culture is conspicuously a phenomenon of the post-war American way of life. The magazine *Fortune* has recently devoted a series of six articles to this phenomenon under the blanket title *Are Cities Un-American?* and for the sixth they called in the service of the Counter-Attack Bureau for a study of down-town areas. The studies reveal that though American problems are vaster in scale than those of England or Europe, they are alike in kind—many Counter-Attack solutions could be applied to them if suitably reinterpreted to fit US conditions. The vast scale, indeed, might prove to be decisive advantage here, the new super-highway programme could open the way to experiments in linear planning, there are the space and the resources

Directing Editors

J. M. Richards
Nikolaus Pevsner
H. de C. Hastings
Hugh Casson

Executive Editor Art Editor Technical Editor

Ian McCallum
Gordon Cullen
Lance Wright

Assistant Editors

production, William Mackie.
research, S. Lang. literary, Reynar Banham.
Editorial Secretary Whi 9611-9

to experiment with radial replanning of the areas around existing towns. The imminent 'revolution in living habits' might still produce a planning pattern of which America could be proud.

218 Flats at Ham Common: Architects,
James Stirling and James Gowan

226 Rural Housing by Ian Nairn The housing designed by Taylor and Green for Loddon Rural District Council in Norfolk is generally recognized as one of the major achievements of English post-war architecture, and the work has now progressed far enough to permit an estimate of its importance and the lessons that can be learned from it. Mr. Nairn traces the evolution of the unique Taylor and Green approach to the problem of siting houses in a landscape that is undramatic but far from characterless, of using new developments to give centres to villages whose previous shape was just a roadside straggle and of evolving a vocabulary of forms, details and colours that have given the houses a character of their own while enhancing the character of the place in which they stand. Where most rural housing has destroyed the sense of place, Taylor and Green's work has left Loddon more Norfolk than it was before.

237 The Exploring Eye: Cappadocia
Architecture probably began with holes in the ground, but the design of such holes is not much studied even among historians. The cave dwellings of Cappadocia represent a dwelling-type that has been in continuous use since before Classical antiquity, has acquired a character and a manner of design that is not merely its own, but has even invaded the constructed dwellings above ground in the neighbourhood as well.

240 Studio House at Seattle: Architect,
Robert Reichert

243 Cinema near Rome: Architect,
Eugenio M. Rossi

247 Kirkstatham by Angus Taylor
The octagonal mausoleum of the Turner family of Kirkstatham in the North Riding of Yorkshire bears a strong resemblance, apart from its rustication, to a design among James Gibbs's papers in the Ashmolean, Oxford. The discovery of an exact copy of this drawing, among the parish papers at Kirkstatham, confirms the connection and suggests that the rustication may have been devised by the local mason. In this study of the mausoleum and its monuments, which

include statues by Scheemakers and Sir Henry Cheere, Mr. Taylor suggests, among other things, how this building for a fervent Whig came to be designed by a High Tory like Gibbs.

251 Interiors: Offices for Air France,
W.I. Designers, Charlotte Perriand, Thomas and Peter H. Braddock

254 Interiors: Offices for Air India, W.I. Architects,
Alexander Gibson, and Philip Lacey of Design Research Unit

256 Design Review

258 Preview: Mausoleum at Karachi
Architects, Raglan Squire and Partners. Designer, Robert B. Roberts

261 Current Architecture

Miscellany

265 Books

267 Exhibitions

268 Townscape

270 Counter Attack

Skill

272 Scandinavian Studies in Building Climatology In situations where the architect, the lighting consultant and the heating consultant might find themselves at loggerheads, the building climatologist, on the basis of exact studies, can often suggest an efficient compromise. This report on recent work in Sweden examines the relative performance of various window-blind materials in controlling the entry of solar heat and the exit of internal heat, the daylighting of factories, and some Danish studies of the penetration of schools.

274 The Industry

278 Contractors,

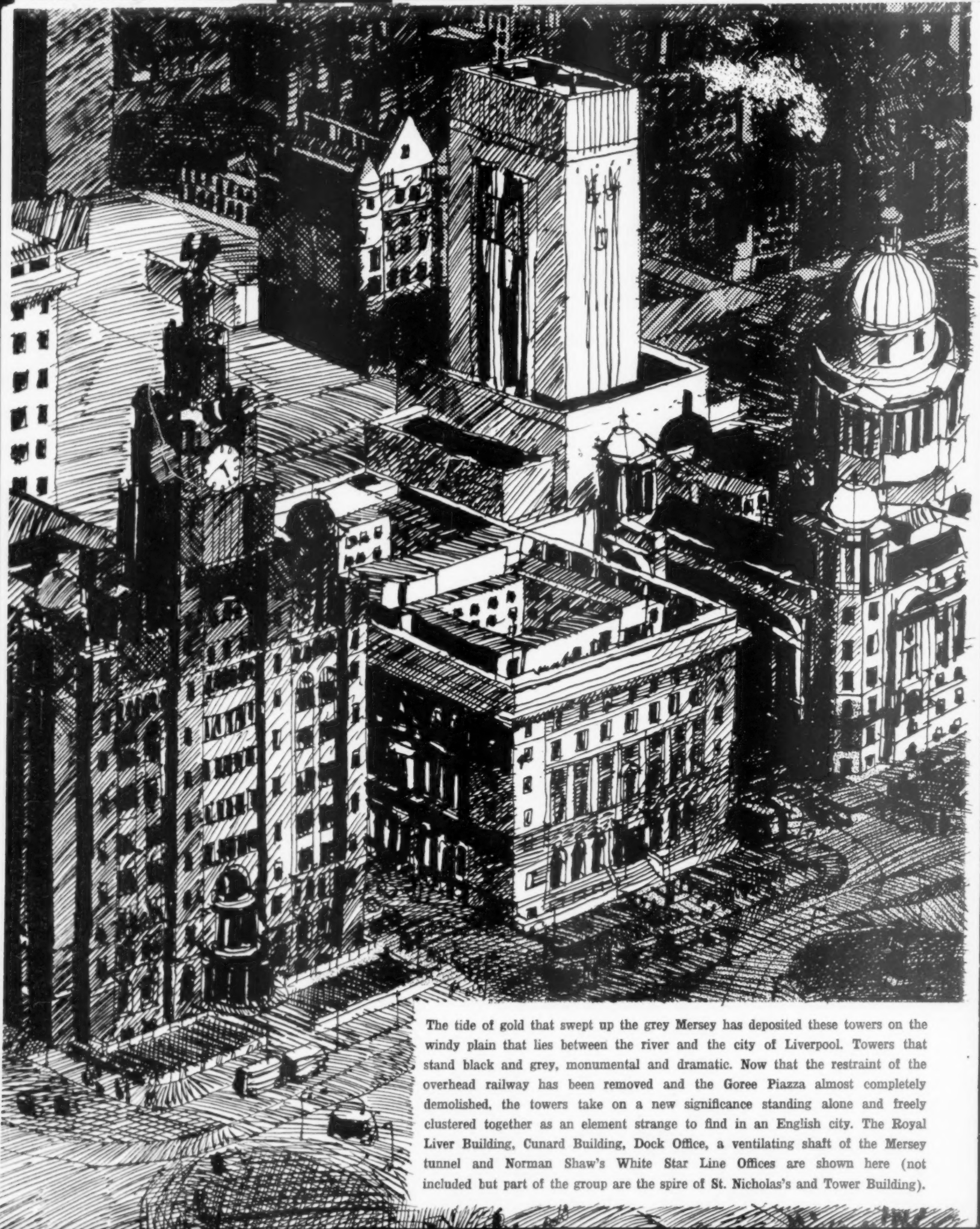
Author: Angus Taylor who is at present teaching art was educated at Sedburgh School and trained as a painter at Leeds College of Art. He divides his spare time between the seasonal occupations of architectural sleuthing, photography and birdwatching.

SUBSCRIPTION RATE: The annual post free subscription rate, payable in advance, is £3 8s. 0d. sterling, in U.S.A. and Canada \$10.50, in Italy Lira 6940, elsewhere abroad £3 10s. 0d. Italian subscription agents: A. Saito, Via Santo Spirito 14, Milano; Libreria Dedalo, Via Barberini 75-77, Roma. An index is issued half-yearly and is published as a supplement to the REVIEW.

THE ARCHITECTURAL REVIEW

9-13 Queen Anne's Gate, Westminster, SW1 Whitehall 0611

FIVE SHILLINGS



The tide of gold that swept up the grey Mersey has deposited these towers on the windy plain that lies between the river and the city of Liverpool. Towers that stand black and grey, monumental and dramatic. Now that the restraint of the overhead railway has been removed and the Goree Piazza almost completely demolished, the towers take on a new significance standing alone and freely clustered together as an element strange to find in an English city. The Royal Liver Building, Cunard Building, Dock Office, a ventilating shaft of the Mersey tunnel and Norman Shaw's White Star Line Offices are shown here (not included but part of the group are the spire of St. Nicholas's and Tower Building).

The Editors

EXPLODING METROPOLIS

This article is not, oddly enough, about H-bombs—at least, not in any normal sense. But, assuming that we can postpone our exeunt for a few more years, we may face a purposeless fragmentation of human society over the whole land surface of the world that may have something of the same effect. America has begun the process already, and the ‘exploding metropolis’ was in fact the general name for the series of six articles which *Fortune* magazine has produced in the past year.¹ For the sixth they asked the Counter-Attack bureau to co-operate and the results were briefly illustrated in the April REVIEW. Making downtown an enjoyable place was only part of the scope of the series; four of the other five articles dealt with slums, the motor car, urban sprawl, and city administration, and the first article in the series had the self-explanatory title ‘Are Cities Un-American?’

The articles make up a frightening mosaic. Soberly and calmly, filled with the statistics which the readership of *Fortune* demands, they are like the first blink of the fire-warning light in the aircraft cockpit. They are saying, quietly and politely, that technology is getting out of control, that we have created superb mechanical equipment for spreading ourselves over the face of the earth without having the faintest idea what we are going to do with it or even why we are creating it at all. That this should have come out of America itself is tremendously hopeful, quite apart from the journalistic courage of a magazine suggesting that 99% of its readership was probably chasing a chimera. In fact, all we have done in Europe in the face of this situation is either to go slavering after the visual consequences of the American way of life as though they were

¹ The series was published in book form in September in the USA by Doubleday and Co., and a paper-back edition will be published next month, price 95 cents.

man's substitute for Heaven, created by a race of supermen—the giant city-contrasts, the super highways, the cool hygienic mobility of supermarkets and drive-in cinemas—or else to condemn the whole thing out-of-hand with a superior Western-European flip of the fingers, and then to suggest the wholesale importation of Western-European solutions regardless of scale or temperament.

The exploding metropolis may well be a British invention, though we don't deserve much credit for it. The expansion of London in the late 1920's and early 1930's was perhaps the first case in the whole world of a city enlarging not functionally—building on the next bit of ground because people had to be housed there, the pattern of all our industrial cities—but as part of a pipe-dream promoted as a business gimmick by builders, estate agents and, to its permanent shame, by London Transport: a game of leap-frog to the green fields, made into a machine which, once started, was almost impossible to stop, because too many livelihoods were involved in keeping it going: a fearful kind of perpetual motion. We took fright and created a town planning organization which, through a mixture of bad luck and bad management, is creating a similar sort of thing in a more insidious way: the creeping mildew rather than the steam-roller, with both ending up at the same thing—subtopia, the annihilation of the sense of place.

America was apparently less affected by these things before the war; perhaps her depression was deeper. But since 1945 everything has combined to set up the biggest sprawl-machine the world has ever seen: the organization of home-builders and automobile-makers, the modern roads, the boom conditions, the population bulge, all spurred on by the latent frontier mentality—perpetuated even though there are no frontiers left and ten million people are coming the other way—and the absurd extension of 'throwaway' techniques to objects where they are meaningless, even though quite practicable, because they ignore the fundamental human need for permanence, a need which can only be driven underground, not suppressed.

The results in the last ten years have been fantastic. New York to Washington is already very nearly one city; medium-size towns such as Louisville, Kentucky, have a penumbra fifty or sixty miles across that is an endless Scotch mist of alternating housing subdivisions, scrubby fields, drive-in cinemas and sandwich bars.² You can never be quite out in the country; equally, you can often never be quite in the town because the centre is full of parking lots or may never have grown up at all, like Los Angeles. On the face of things it seems absurd that America, with only four times our population and thirty times our area, should be having this trouble: and in fact any air journey will show the enormous empty spaces in the US. Fly east out of San Francisco and the slop goes on for perhaps a hundred miles: then the hills begin and there are no houses at all for several hundred miles. One point about this open space is, as one of the *Fortune* articles puts it, that 'thousands of acres of empty land in Wyoming is not going to help the man living in Teaneck, New Jersey'. Another is that all the empty space in the world—quite literally—is not going to help if man insists on taking up ten or twenty times as much space as he need do in the course of a working day—space in the parking lot, space on the freeway, empty garage space, space for the drive-in and the supermarket and space around the shops for the delivery vans.

The solution? Well, yes: the remaining few hundred words would be just right for the trite phrases about community life and tight living. But in fact some of the ideas that

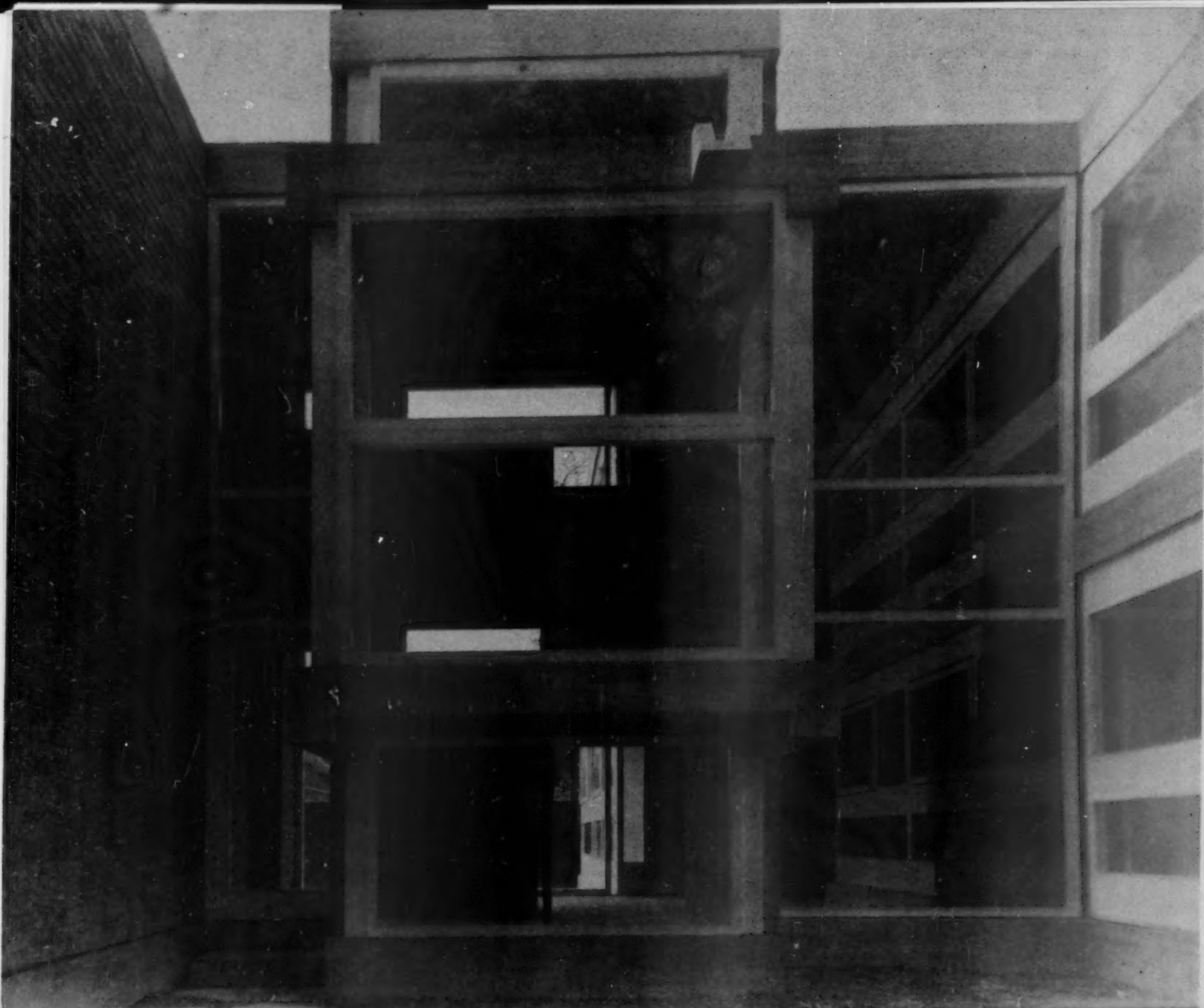
² Good design of course is not the point here; most subdivisions are much better than the British average, and the hot-dog stalls and filling stations have plenty of valid and virile character of their own. The trouble is that they are all being mixed up together.

we have been trying to preach in the last few years, notably in *Counter-Attack*, might be of service as long as they are interpreted entirely in American terms and to an American scale. The differences, clearly, are going to be very large, but they are not fundamental—if only because, to be naïve about it, both nations belong to the human race. The basic idea is to separate the parts of the environment back into town-suburb-country from an undifferentiated splurge. This could be done both in a linear way, like beads on a string, and in a radial way, using segments and linear-city ideas to provide opposites cheek by jowl—the country reaching right into the city, and so on.³ Together the mixture of these two ideas could be used in a country as big as America to canalize the sprawl-machine to give a pattern instead of chaos: a pattern of small self-contained communities at whatever density the inhabitants wanted, the determining factor being the greatest distance any person need walk to reach open country, and of cities two hundred miles long and two miles wide with all transportation arranged in depth along the centre line like some monster electric cable. Another thing that might be done is an analysis of the human and financial cost of sprawl—the difference in the way of life between ten thousand people commuting from the edge of New York or Los Angeles and ten thousand people in a self-contained small town. With the goodwill of corporations and foundations the two towns could actually be built and compared—the sort of social experiment which only America and the Americans have the means and the drive to do. And along with the electronic computers and bigger bombs the engineers and the scientists could be starting on a concerted programme to get means of transport neater and smaller⁴—the pocket helicopter, or the weatherproof shopping capsule which will do 30 m.p.h. and which you can hang up like a mac. At one extreme, if all personal motor transport was as thin as a human being (or, clipped together, four, eight, human beings) transportation problems would disappear.

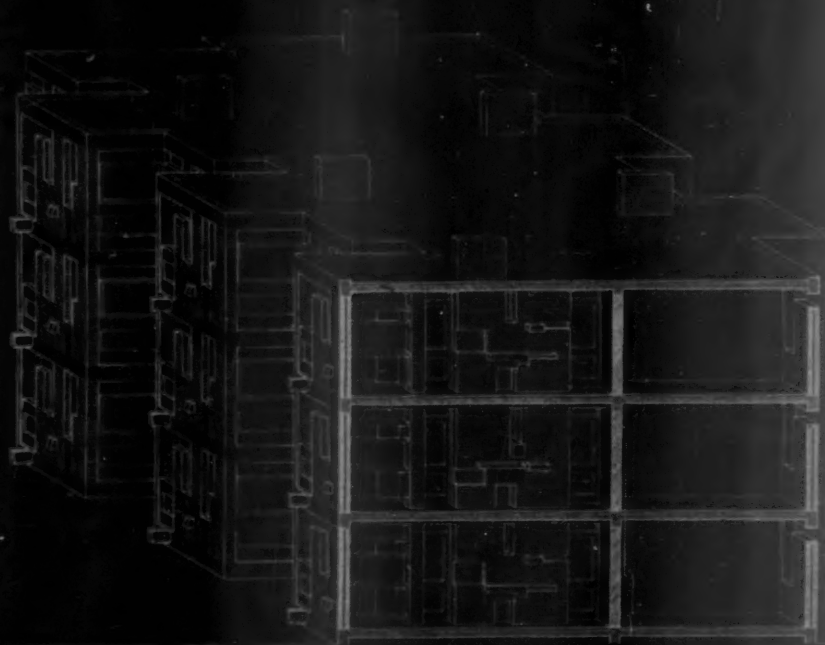
America now has the means to achieve all these things—that, in fact, is just the trouble: it has all the means and no ends. We must all, the whole world over, stop boasting about technology and mobility and try to use them to make life better and more exciting—instead of technology and mobility using *us* to make life monotonous and frustrating. And the vast new 41,000-mile programme of state highways, which was one of the things that touched off the *Fortune* series, could be the starting point for this. As things stand, the highways will just add to the sprawl near the centres of population in the east and west and run across open country—thousands of miles of it—in the Mid-West, South and South-West. Applying linear separation they could be the string for a chain of self-contained new towns carrying their own employment, with the home builders, the industrialists and the federal advocates of dispersal-for-defence's-sake all working together. Applying radial separation, they could be the backbone for linear cities, hundreds of miles long, in the empty parts of America. The planners of the federal highways have frankly said that their aim was to 'disperse our factories, our stores, our people; in short, to create a revolution in living habits'. That aim can produce a pattern America can be proud of, or it can produce, nation-wide, the same old goop that covers most of New Jersey and Long Island. The choice is still there—but only just.


³ There is obviously the merest draft of a sketch of a solution; the ideas themselves are not worked out yet. But they will be, in future issues of the *Review*; for those who like shibboleths the linear way is called a continuum and was invented by Gordon Cullen two years ago; the radial way is called contraries and was invented by William Blake a hundred and fifty years ago.

⁴ And the automobile stylists too—not for any reason concerned with whether the cars look good or bad but simply because long cars are ceasing to be a practicable proposition in towns: some present thinking would seem to prefer scrapping towns to shortening cars, a splendid example of cutting off one's nose to spite one's face.



FLATS AT HAM COMMON



The structural and aesthetic elements of these flats, exemplified by the stair-well of one of the smaller blocks, opposite (above) , are brick walls carrying bare concrete slabs, and white-painted wooden frames carrying large panes of glass. The resulting rich complexities of rough and smooth, solid and transparent, are enhanced—on the larger block—by a deeply indented façade (below) and—in both types of block—by fireplace units that bring exterior surfacing materials indoors.

FLATS AT HAM COMMON

ARCHITECTS

JAMES STIRLING AND JAMES GOWAN



1, the three-storey block seen in its setting of established trees—as the site plan shows (above) the wall on the boundary of the site stands farther from the ground floor windows than might appear from this view.

Younger English architects' attitudes to what they call 'the white architecture of the Thirties' are ambivalent: on the one hand they respect and even envy the significance as revolutionary gestures of such buildings as Wells Coates's Lawn Road Flats, but on the other hand they are suspicious of the 'naive conviction that all buildings could be designed in "international style".' Most of them now conceive of the possibility of 'multiple aesthetics', or 'the style for the job', rather than a single dominant style to be applied to all classes of buildings.

It is in housing that this changed mind appears most clearly, and the **REVIEW** has already published such buildings as the Smithsons' Sugden House at Watford (September, 1957), and the houses in Hampstead by Howell and Amis (Nov-

ember, 1956), as well as an earlier house by Stirling and Gowan (April, 1958) in all of which it can be seen, in spite of divergent tendencies of personal style and professional philosophy. What emerges from all these examples, and even more forcefully in the flats illustrated on the following pages, is an attempt to face the economic realities of dwelling construction in England today, and to extract from them an architecture that is workable in plan and grouping, and an aesthetic that is affective, rather than merely sufferable. The result seems to open the prospect of a sophisticated vernacular—and if that appears to be a contradiction in terms, then it may well be that our terms are in need of revision, for a vernacular without affectations of primitive innocence is one of the possible lines of delivery from the present depressed state of housing design in England.



2

FLATS AT HAM COMMON



3

2, a view down the access side of the three-storey block towards the two-storey block: the main vertical mullion of these windows corresponds to an internal structural wall that does not, however, reach the plane of the window.

3, a part of the rear façade of the three-storey block, with staircase windows, centre, kitchen balconies, right, and bedroom windows, left.

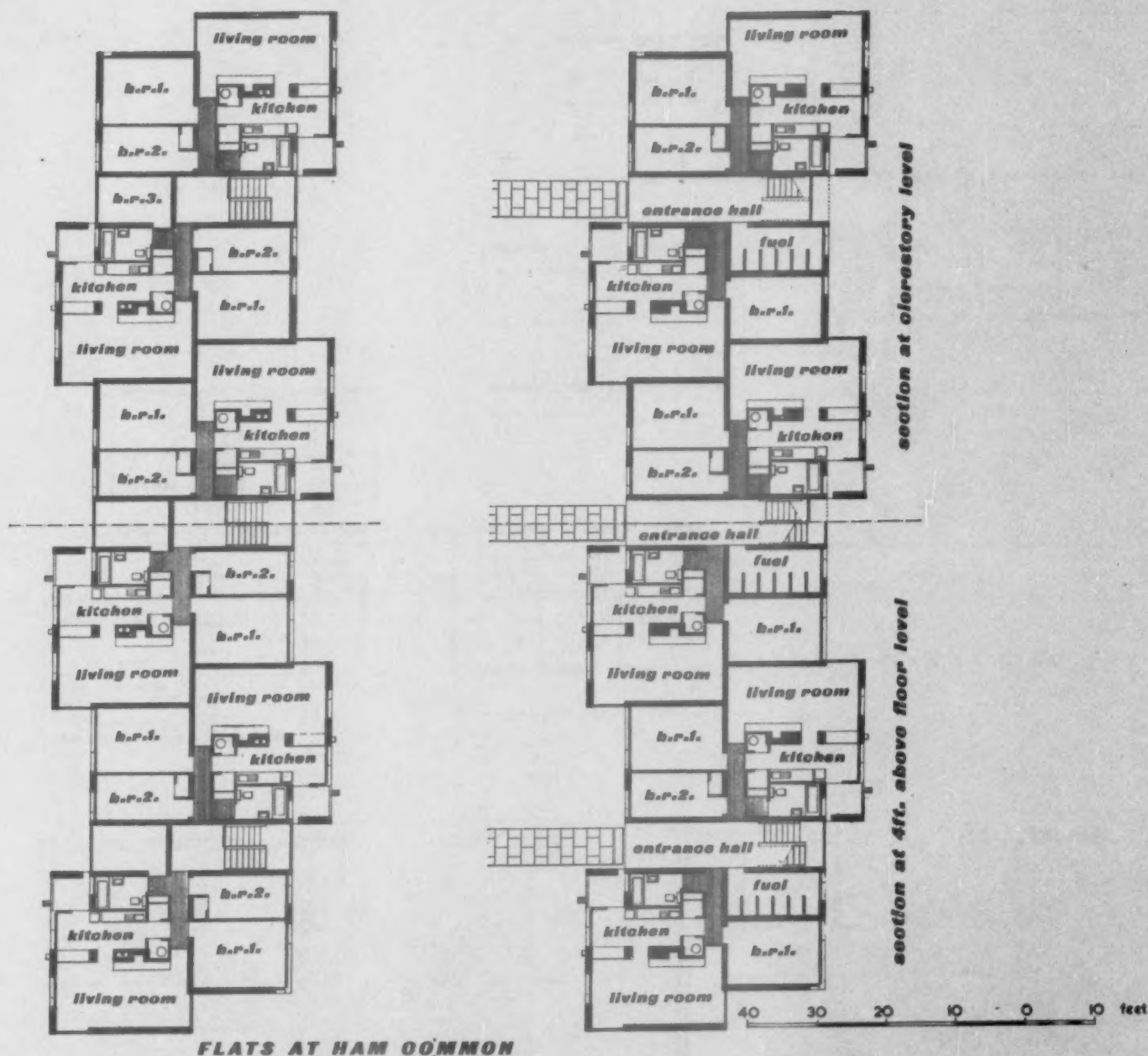


4



5

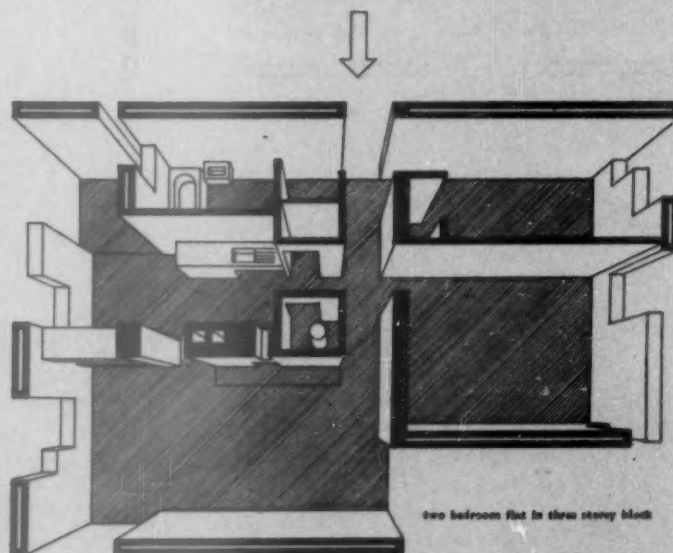
4 and 5, two further views of the rear façade of the same block, showing the depth of the recessing of the bedroom and staircase bays, and the relatively small amount of the calculated brick wall that actually supports one slab above another.

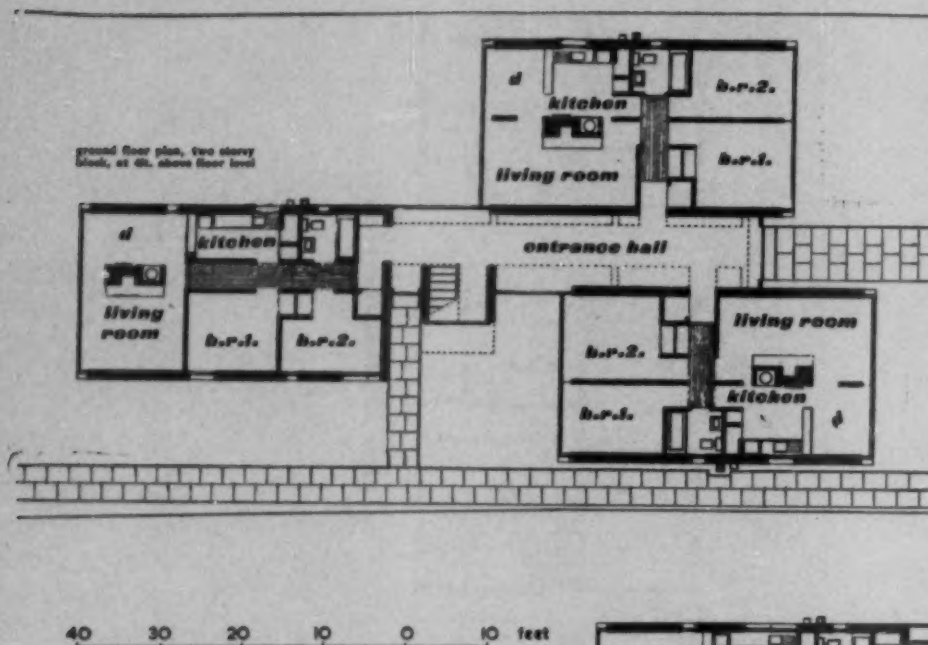


This site is the garden of a large Georgian house which fronts on to Ham Common forming a narrow strip with a belt of trees along its eastern boundary. There are three blocks, one is three storeys containing 18 flats and the other two are two storeys containing six flats each.

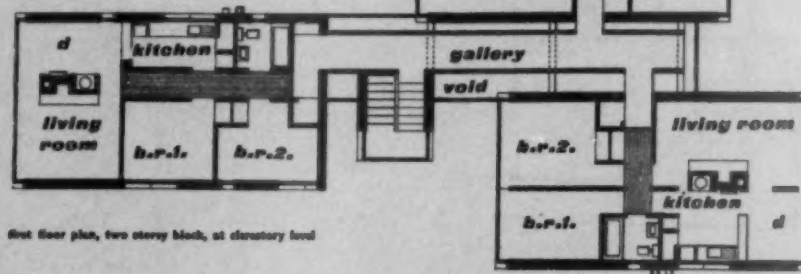
The structural walls are load-bearing bricks, with floors, roofs and staircases of in situ concrete. Externally and inside the entrance halls these materials are left exposed, but inside the individual flats, ceilings and walls are plastered. In construction the two smaller blocks differ from the three-storey block, as in the former it is only the cross walls which are load bearing, while in the latter all walls including the peripheral walls are structural.

The floor to ceiling windows of the living rooms have three 12 in. deep horizontal transoms with the middle horizontal occurring at hip level. These timber transoms are packed with insulating material to help reduce heat

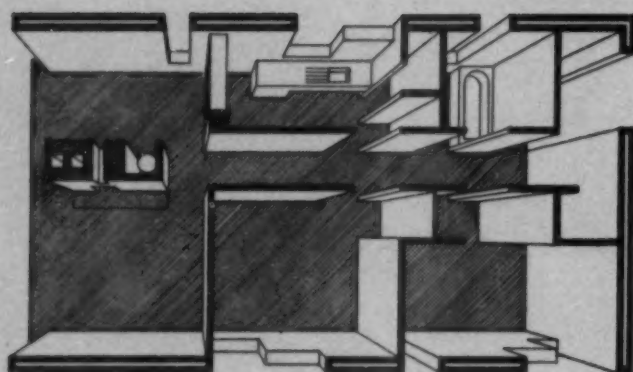




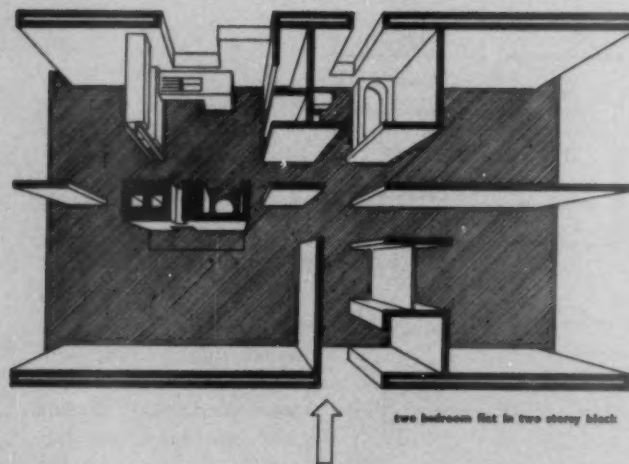
FLATS AT HAM COMMON



first floor plan, two story block, at clerestory level



two bedroom flat in two story block



two bedroom flat in two story block

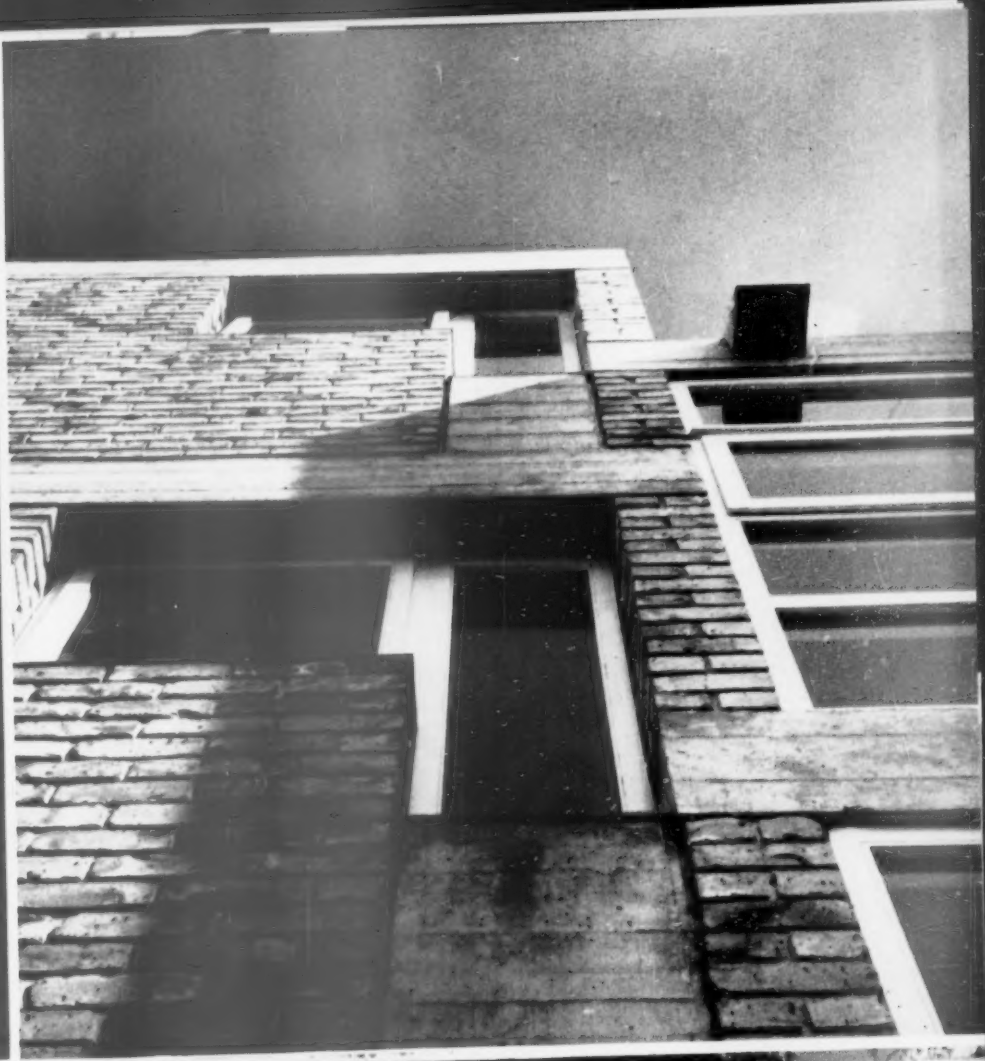
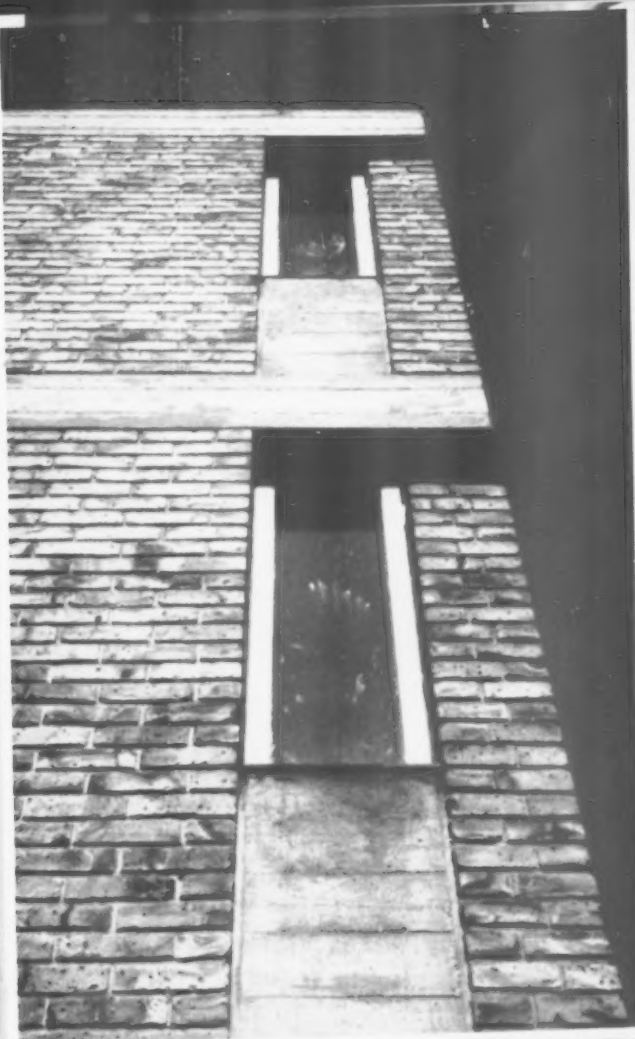
loss. In the smaller blocks these window/walls pass in front of a $4\frac{1}{2}$ in. structural brick wall. In the three-storey block, calculated brickwork is exploited to its ultimate and many of the piers are stressed to their maximum. On the east and west sides the peripheral walls stop short of the concrete edge beams to provide clerestory windows in all rooms; the remaining portion of wall which carries up is the minimum required to support the superstructure. This use of clerestories, pierced, and floor to ceiling windows gives a variety of internal lighting effects.

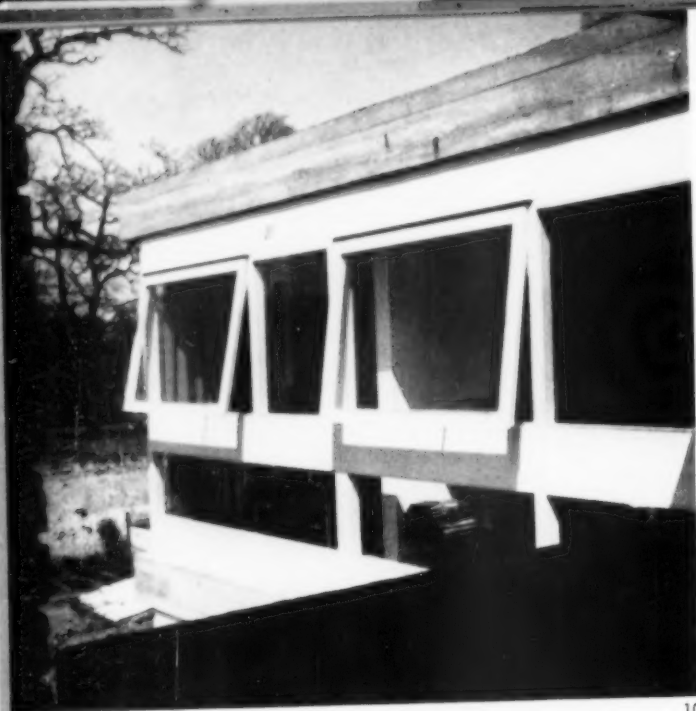
The living, dining and kitchen areas are planned

round a structural brick fireplace which contains the back boiler, cylinder and linen cupboard. This bulk is sufficient to establish a central element of the same scale and finish as the exterior. Wherever possible, such as in the entrance halls, staircases, etc., a direct reference is made to the exterior of the blocks. So also with the precast concrete mantelpiece and corbel shelves, which built into the fireplace in various assemblies (four in all) correspond to the concrete air bricks and overflow gargoyles on the outside walls.

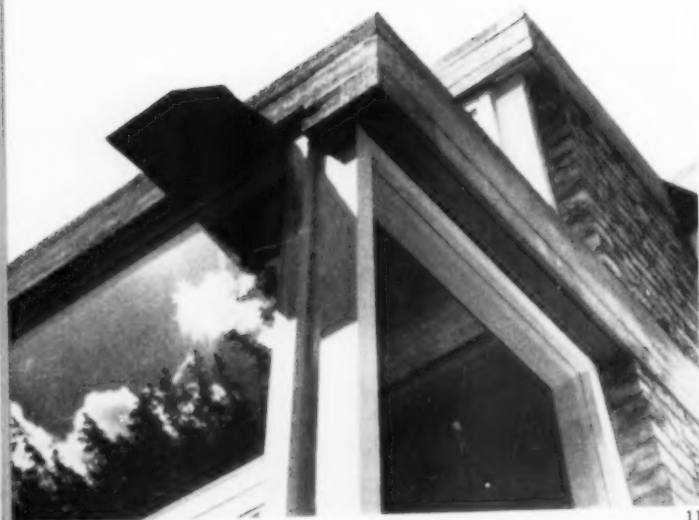
The flats are for sale at prices varying from £2,925 to £3,700 inclusive.

- The character of the elevations of these flats comes not only from the abstract relationship of solid and void, but also from its material realisation in concrete, brick, wood and glass.
- 6, the most striking usage in this respect is on the exposed bedroom angles of the three-storey block, where one vertical light lies round the corner from the main window.
 - 7, the space below the window is filled not with brick, but with an upstand from the concrete floor-slab, partly to stabilise the brick-work, and partly to give a better showing to the concrete.
 - 8, the resulting transparencies give contrast and relief to the emphasised solidity of the structure—in this case a view through a living-room window in the three-storey block.
 - 9, the simplicity of the repertoire of exterior details employed is brought out by this view of the bathroom and kitchen zone of the two-storey blocks.



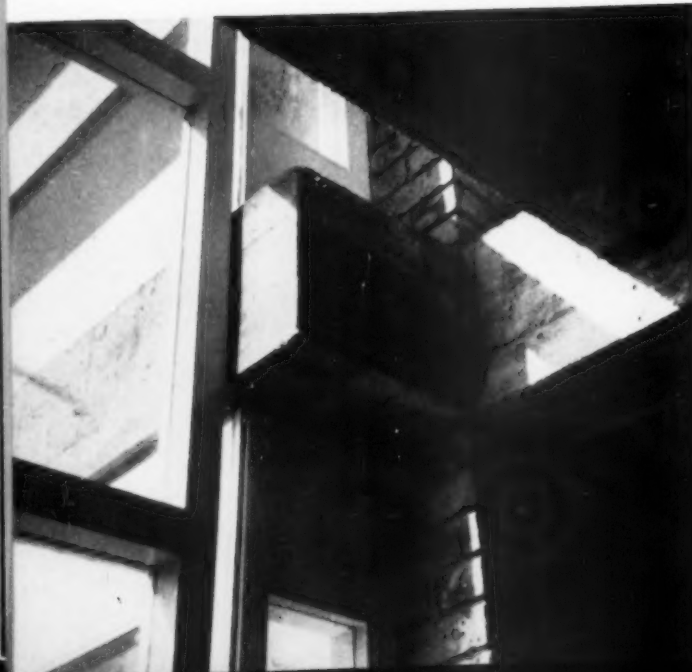


10



11

12



FLATS AT HAM COMMON

10. the living-dining room window of an upper flat in the north two-storey block, seen from the access gallery. The wooden transoms at top, bottom and hip level give a greater feeling of security than would total glazing, and create a deliberate wall/window ambiguity.
11. the detailing throughout emphasises the separate identity of parts, in this corner of the projecting stair-landing of a two-storey block, the side and front windows are distinguished by the extent to which they have, or have not, been taken up into the concrete above.
12. while in this detail the glazing of the main hall window, on the opposite side from the stairs, is isolated from



section through a living room in three storey block showing fireplace and serving unit with kitchen and balcony beyond

- the return glazing of the windows of the flats by a vertical strip of glass an inch and a half wide.
- 13 and 14. the scale of the kitchen and servery details has been made to that of the exterior, using timber sections of a large size by fashionable standards, and massive teak draw-pulls.
15. the consonance of exterior and interior extends to materials as well—although most of the surfaces inside the rooms are plastered and painted white, the fire-place units are of the same brick as the main structure, and contain cast units, such as shelves, of precast concrete, similar to the ventilators and spouts on the outside.
- 16 and 17. in the entrance halls of the two-storey blocks, circulation at the upper level is by a concrete gallery carried clear of the brick-work on transverse beams, the landing slabs of the staircase are cantilevered from beams set in the length of the walls that flank the stairs, and the hand-rails and balustrades to the stairs are formed from overlapping triangular frames of steel tube.

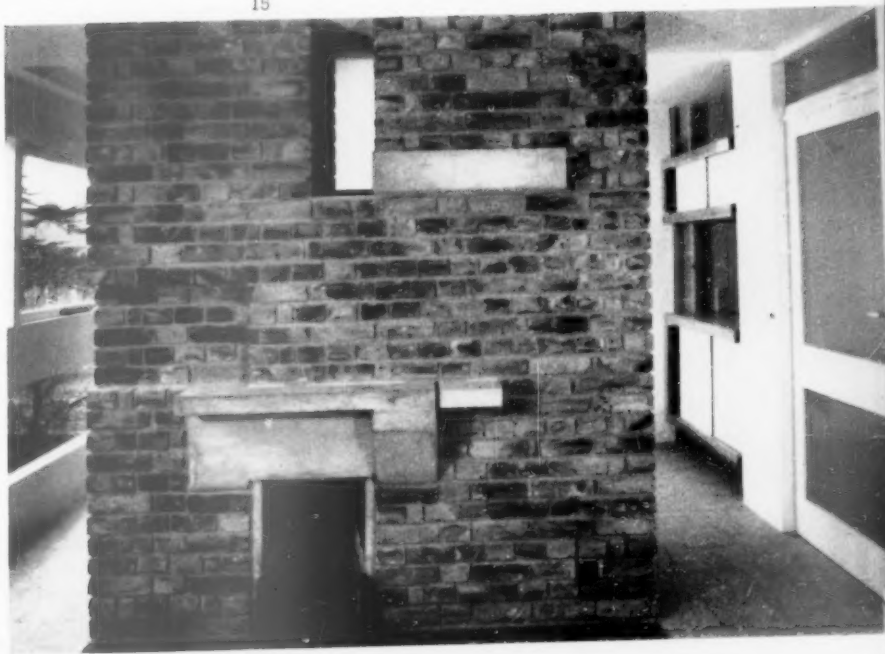
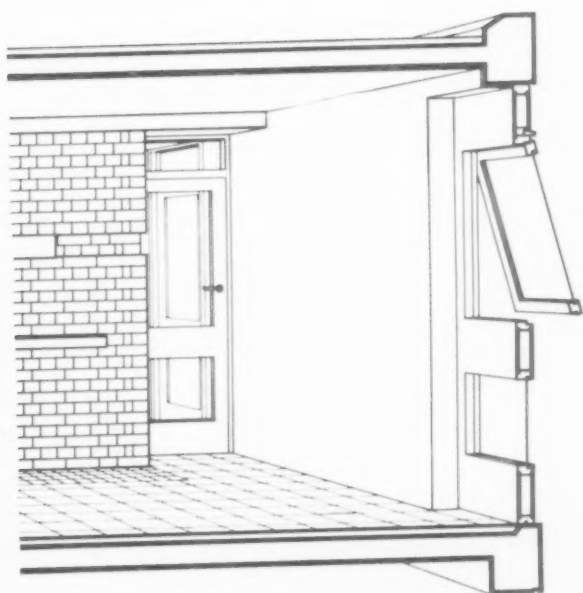


13



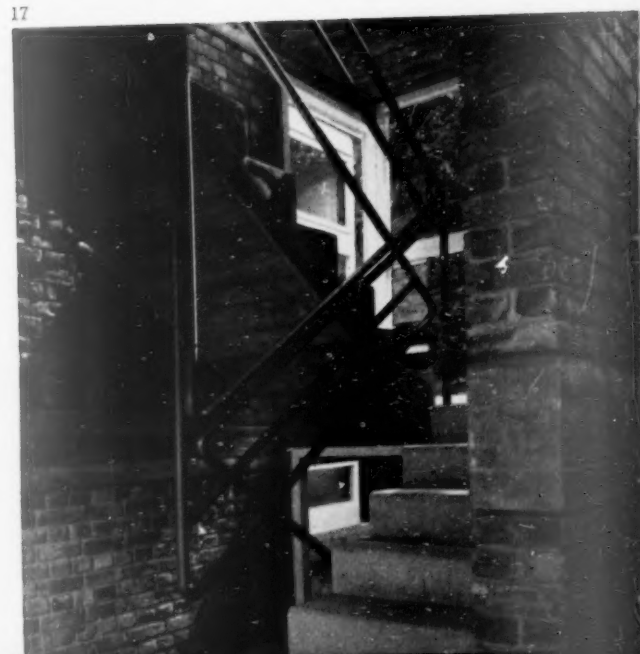
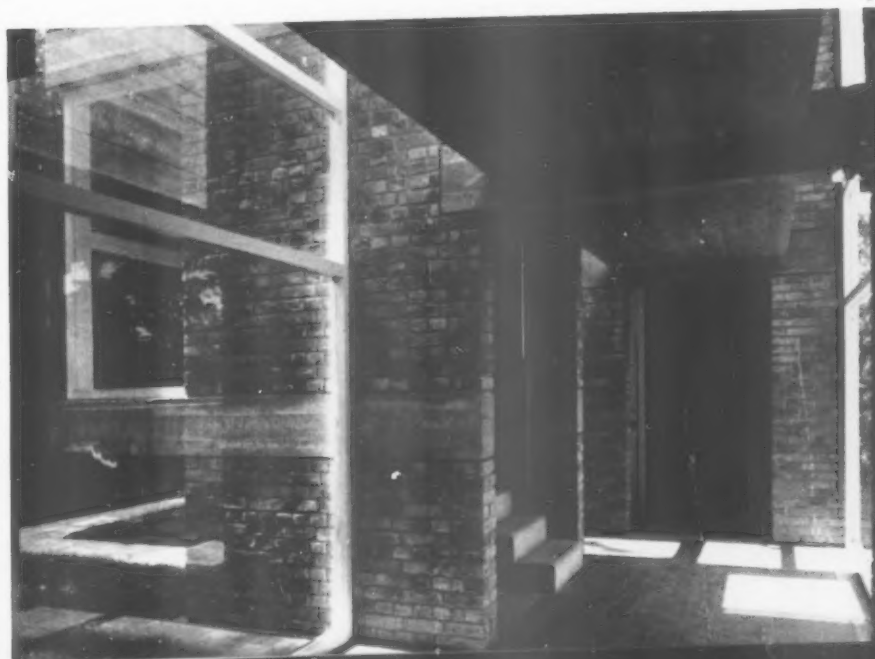
14

15




16

17





Preserving the architectural unities is perhaps more important in rural housing than anything else; the buildings must be designed country-style. That this can be fully achieved within the limits of standard house types and mass-produced details is clearly shown in the following article on the work of Tayler and Green for one rural district in Norfolk. The photographs opposite  show the outside and inside of this achievement. 1, top, the village from outside seen across the fields, crisp, hard and agricultural (Hedenham). 2, bottom, the cosier and softer internal face of the housing, blending perfectly with the existing houses (Claxton).

Ian Nairn

RURAL HOUSING

POST-WAR WORK BY TAYLER AND GREEN

Cure the fearful state of rural housing in Britain today and you cure the whole of sub-topia in miniature. Everything that goes to make up the annihilation of place is normally combined in the squat forlorn boxes in a field outside the village which is the average council estate: the by-law mentality, the false use of local idioms (there are more false hood-molds than real ones in parts of the Cotswolds nowadays), the negation of any pattern or group possessed by the old village, the professional *laissez-faire* that starts with an indifferent design indifferently detailed and then repeats it.

What follows is simply the story of one firm of architects and one local council who in twelve years have overcome all these things: Tayler and Green and their clients, the Loddon Rural District Council. With a little luck and a lot of professional responsibility, something like this might have happened in every rural district in the country. We have built, since the war, enough houses to have made a complete new set of villages which could have been as famous as the German post-war churches or our own post-war schools. The ordinary traveller about England, as he sees village after village that is a little miracle of vernacular building encumbered by estate after estate that is a little miracle of bone-headed beastliness, has a right to ask why this didn't happen.

He may ask it of committees and of planning authorities, but eventually he must ask it of the chap who put up the nonsense: the architect, who only too often was an engineer or surveyor. Basically, to put it bluntly, this is a case of professional failure, and if the culprit now asks piously 'what else could I have done?' let him look here at the work of Tayler and Green. The members of the Loddon RDC were not a miraculous Norfolk race of Men of Taste left over from the eighteenth century; they were just ordinary councillors

who had to be argued with and convinced like any set of councillors anywhere. Every other rural district in Norfolk shows evidence of designers who didn't argue, who took the easy way out.

The crisis of rural housing is the crisis of regionalism itself. Local differences have already taken a battering from forty years of hack-work in council estates—estates which are now often larger than the original villages. Rural slum clearance may account for much of the remainder within the next ten years; the day may still be saved if it is replaced by infilling designs to fit each individual village and to interpret each local pattern—not by reproducing local details, but by understanding the *genius loci* and then expressing it in twentieth-century terms. The alternative is a dozen arty villages in each county preserved as folk museums or equivalent follies, and the rest quietly ground underfoot, as the Thames-side villages of Kent and most of the villages of Bedfordshire have already been ground underfoot.

The genesis of this housing is simple: Herbert Tayler and David Green met at the AA and set up in partnership in 1938, taking over Green's father's practice in Lowestoft. One of their wartime jobs was an estate of four houses at Blundeston and two at Wrentham for the Loddon RDC. These were seen and liked by the Loddon RDC who engaged the firm in 1945 to carry out their postwar housing programme. The firm has split up the work unequivocally so that Tayler designs and Green handles the site meetings and the organization; the office is small, employing unqualified assistants wherever possible, the opposite of the architectural factory or team and possibly the organization best suited to a small provincial practice.

The countryside thus given over to the architects to make or mar was something more subtle than the endless near-flatness of most of inland Norfolk. It is a triangle with twelve-mile sides between the Bure and the Waveney Rivers; without hills but with continuous undulating pasture-land spilling over into bigger views over the river valleys at the edges and over the fens to Yarmouth: the sort of landscape that

produces a continuous series of ready-made Constable compositions. The brick and pantile cottages are organized into villages but not into village groups, and Loddon itself, population 1,100, is the nearest thing to a town. The other places are queer loosely linked agglomerations of houses whose wayward charm is due more to the air and light than to the buildings themselves. The architectural problem was not to augment village centres but to create them, so that, for once, the estate-sized plots could be put to good use. There has in fact been no infilling of single houses; the smallest unit has been a terrace of four.

If the sites are visited in chronological order they become a fascinating sequence of creative development. And the onlooker can start with a premise that rarely applies—that the fundamentals of proportion and siting and colour-sense which are so often hit-and-miss in similar large programmes (they are hit-and-miss in the Hertfordshire schools, for example) can here be taken for granted. What is to be seen in the sites is a creative imagination operating with all

these natural gifts, not a creative imagination struggling desperately to find means of expression. Both types are always necessary, but Tayler and Green's type is much more necessary to-day, with so much half-baked talent being cast out among a bewildering choice of expressive languages.

The first two sites at Loddon and Thurlton, 1946–8, used the same type of linked pairs as the housing at Blundeston,* and

[continued on page 235]



3, the village street of Haddiscoe: the matrix, the haphazard atmospheric village centre which the architects had to augment and intensify. In many cases, there was not even a group as loose as this—at Bergh Apton, Woodton and Geldeston the new housing has itself become the village centre.

* Although this article only describes the housing in the landscape it ought to be mentioned that the house plans themselves made several big improvements which later found their way into the Housing Manual and thence into housing estates up and down the country. The care for detail and the imaginative grouping could not, alas, be similarly reproduced from a Manual. The houses were obviously prototypes for a great deal of work in the New Towns: in fact Tayler and Green have been continuously asked by New Town Development Corporations to design for them, and they are now going to build an area at Basildon.



WINDMILL GREEN, DITCHINGHAM 1947-9

4, the first terrace houses and the first big

site—an open-ended green of thirty houses; as it appeared in 1950 and 5, as it is today with the trees fully grown.

4 5



WOODYARD SQUARE, WOODTON 1950-1

6, a site of twelve houses using stepped terraces and a different shade of colour-cash

for each house, and creating a village centre where none existed before. It looks terribly easy—but how many times has it happened in Britain since the war? Plan, centre right.



BERGH APTON 1950 AND 1955-7

Three new terraces added to the earlier single storey cottages (on the left in 7) to make a tiny square. 8 shows the outside,



7

8

seen crisp and rural across a ploughed field with the colour effects coming entirely from polychrome brickwork. 7 is the intimate and carefully planted interior space. Plan, above right.



9



10



12

KELL'S ACRES, GELDESTON 1951-2

A complex L-shaped site on a gentle hill-side above earlier Tayler and Green housing. 9, on entering, the eye goes to the end of the street, and 10 is led into the corner by the

stepped roof-line on both sides. 11, near the corner of the L, the view suddenly opens out to reveal a little square of single storey houses, with an utterly unexpected view of the Waveney water meadows beyond and above them. 12, the earlier site (1949-50) with Kell's

Acres behind: visible proof that a vernacular can be created consciously as well as being made instinctively and spontaneously.



11



13

LODDON 1952-5

The biggest site in the programme: 76 houses. It was originally to have backed on to Loddon's main street instead of being cut off in the fields where the effect, though it is a textbook of picturesque design, looks a little contrived. 13 is a view of the whole site

from the west. 14 is looking east along the complex roof-line and street-line of Kittens Terrace and 15 shows the way in which a single service road runs into the centre of a triangle of houses and becomes an asset instead of a liability by the use of the stepped flanking walls curving away out of sight.



14



15



rurality

16, rural East Anglia is neither soft nor pretty; it is nearer in spirit to an industrial landscape than to the picturesque leafiness of the South-East or the West Country. Hence the simple commonsense elements used by Tayler and Green as the basis of their vernacular have been interpreted in a spare angular industrial way, nowhere better seen than in this terrace at Broome, built in 1956; the crisp unequal roof pitch, the rhythm of drainpipes, the post and rail fence. Nothing more complex is needed here, a complicated intellectual exercise would just look silly.



16

skyline



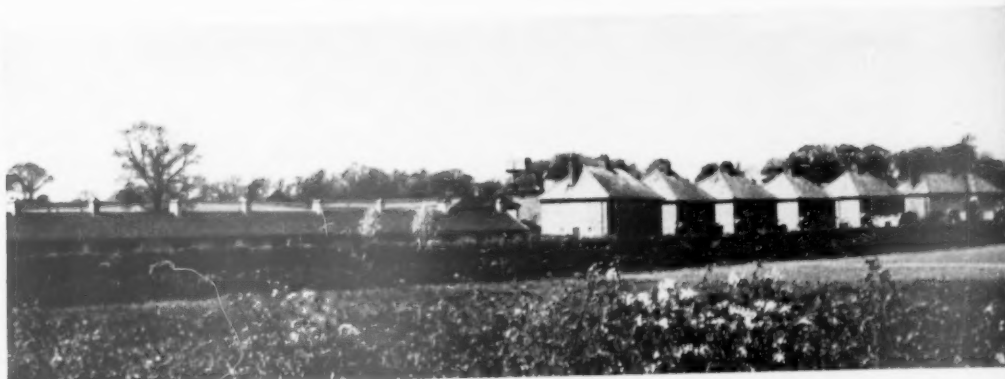
17

Three successful variations on the most difficult single problem of rural house design.

17, the simple stepped skyline of one of the early terraces, at Wheatacre.

18, the long horizontal skyline of Agnes Hood Terrace at Ditchingham, making a perfect landscape point by contrast with the galumphing rhythm of the pre-war semi-detacheds next to them.

19, the truly East Anglian dissonance of St. Mary's Rect at Aldeby where an earlier stepped terrace was extended in 1952-3. The calculated discord leaves the viewer gasping for breath; but like all the other effects it is used for the sake of the site, not imposed as a personal mannerism.



18



19



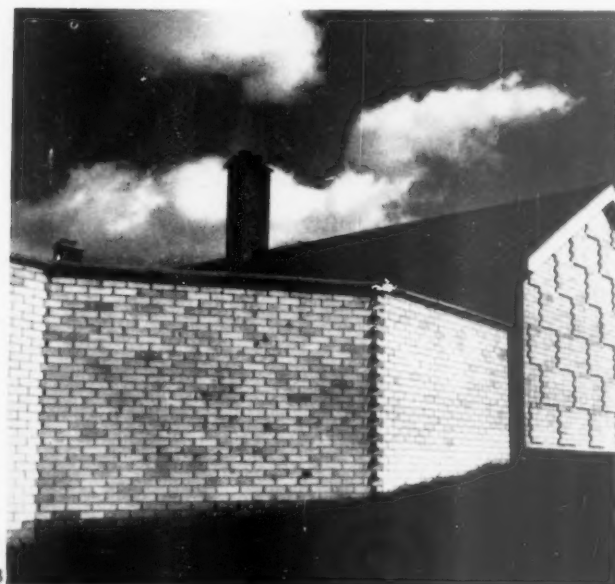
20



21



22



23

corners

What in the average estate becomes a depressing gap in the plan to be filled with concrete posts and wire has been transformed by Tayler and Green in as many different ways as there are sites.

20 is a corner of the earlier part of Bergh Apton, using colour wash instead of brick patterns, but still in an East Anglian way—the gable end is painted black.

21, at Hales, of 1953-5, shows the later vocabulary in its full angular complexity—almost too complex for a village, as the architects themselves realized.

22, at Gillingham, is a subtler variation to suit a less remote site, using a curved screen wall.

23, the screen wall translated into the most angular and astringent form. The bricks are white stocks.

end walls and bargeboards

More simple and easily comprehended elements which will keep their meaning as long as human beings need to cover themselves with walls and a roof. The carved bargeboards and patterned gable-ends are a Victorian idea but their use here is not neo-Victorian: in its fitness for the type of job, its cheapness and its use of industrial conditions, it is more 'modern' than the most outré technique.

24 shows the planned-for effect of weathered colour washing on one of the earlier sites, with the original brick colour beginning to show through the paint.

25 and 26 are copybook examples of what can be done by simple unaffected attention to detail.

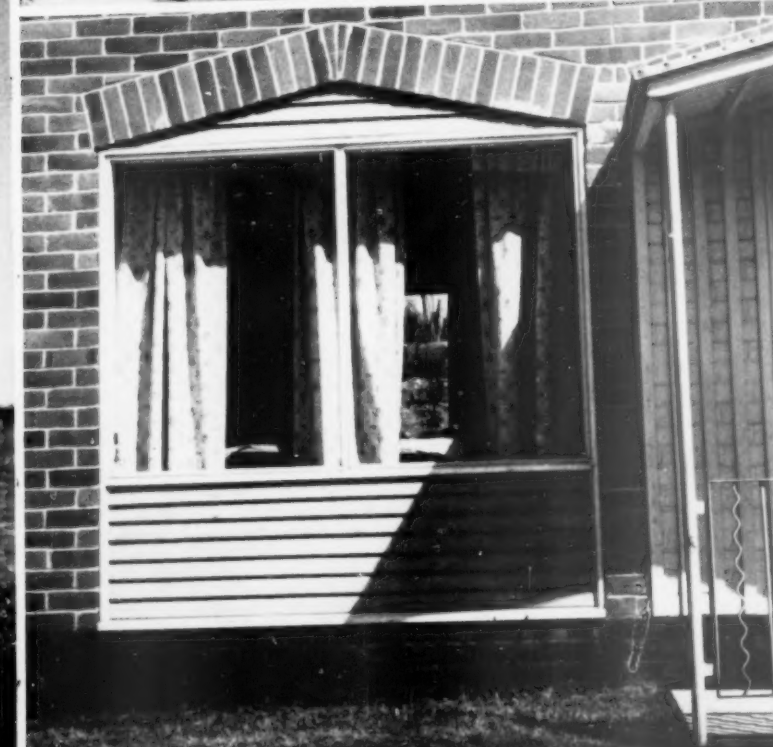




details

27|29
28|30

27, patterned white stock brick (a close-up of 22), 28, plain yellow stocks and a pergola, 29 and 30, porch and window details, all from the later houses, the sites of 1952-7. All of these ornamental details are industrial, none of them is a bogus craft revival, and all have some chance of being enjoyed by their inhabitants, and being copied by the local builders, as is already happening. They all reflect the East Anglian spirit, just as Eric Lyons' speculative housing estates reflect the softer, lusher landscape of the Home Counties. The one basic quality needed to produce them is, to put it bluntly, professional self-respect; yet how many Council estates are there like this among the thousands built since the war, the hundreds still building.



continued from page 228]

some of the early sites also used Airey prefabricated houses, landscaped with the care and sensibility which the original designers may have hoped for but which so rarely happened. The effect of these is very pretty but not fundamentally removed from a high-class housing estate; they could have been part of a city suburb and they could have been built anywhere in the architecturally advanced countries of the 1940's; translated to the shores of the Zürichsee they would not look in the least out of place. Local feeling came later, and gradually, and it is an exciting thing to drive through the Loddon area and watch the later housing becoming more and more East Anglian, less and less International Good Taste. All the houses, incidentally, have front gardens, relying on the natural countryman's instinct for flower-growing, aided by some bigger planting done by the architects. The expectations have been magnificently fulfilled; the earlier estates now look like rural idylls. This is partly due to the trouble spent on everything inside the site—fences, gates, verges—and to thirteen years of struggle with the local purveyors of poles, wire and bus shelters.

The third site, at Ditchingham, 1947-9, introduced terrace houses which thereafter became standard practice. At the same time the elements of a vernacular vocabulary were being brought together: simple commonsense elements, because rural housing is a simple commonsense job, with no need for an elaborate and deeply intellectual design philosophy which remains quite incomprehensible to the inhabitants. Pantiles were used first in the standard local vermillion, and then in a range of related colours: brown, grey and glossy black. The glossy black tiles, which were a local habit in the c18, were originally obtained locally as something of a craft revival; Tayler and Green now find it easier to get them from Somerset. There has never been any reluctance to make the best use of existing technology, which is very refreshing, because such a deliberate attempt to create local feeling might so easily have turned Olde Worlde. Colour-washing, which was used because of the postwar lack of facing bricks, started in pastel greens and buffs spread over a whole terrace and finished with punchy hard reds and blacks used on one house at a time. The colours were deliberately designed to be seen after they had weathered—i.e. with the brick textures showing through—a nice piece of visual calculation which has proved after eight years to be exactly right and sound economic sense as well (alas for Tecton's washable but unwashed tiles). The other items were units such as bargeboards, pergolas and porches—all the human and early comprehended effects which will stay valid as long as human beings themselves.

The first of the terrace sites, Windmill Green at Ditchingham, was made into an enormous open-ended green of thirty units, an attempt to entrap the whole of East Anglian space in one great gesture. It is a kind of oath of allegiance to the landscape, and the firm never subsequently forced such statements on to sites which could not take them; Ditchingham was the only big flat site in the whole programme. On the next few sites terraces were put up in runs of four to twelve houses, each having a different effect

rural housing: reverse of the coin



And here is the other thing, the too-familiar thing, as a reminder of what in fact normally gets put up under the name of rural housing. These examples come from local authority work in the same



part of East Anglia as the Loddon RD; connoisseurs of the style will admire the careful differentiation of the units in a, the splendid axial vista in b, the elegant corner treatment in c, the unity with the surroundings in d and e and the



careful attention paid to detail in f.

Pathetic targets, not worthy of such ponderous irony? Maybe, but as long as work like this represents the average rural housing estate it is the English landscape and village centre which is the pathetic target also.



in the landscape: Wheatacre and Kirkstead quite alone in the fields, Hedenham in parallel terraces above a stream, knitting together scattered cottages, Thurton providing a cul-de-sac centre off the main road, Haddiscoe transverse to the village pattern at the top of a hill, Hales parallel with it at one end giving a focus because of its rich dark colours, Woodton, with only twelve houses, making a completely new centre round two sides of a hilly green.

The first single-storey houses were used at Geldeston in 1949, and the first curved terrace of single-storey houses at Ditchingham in 1950, making a model landscape point about rooflines by comparison with the pre-war council homes next door; curved two-storey terraces appeared at Chedgrave in 1951. With the return of facing bricks in 1949-50 the number of possible variations were greatly increased and here Tayler augmented the East Anglian effect not by copying any local mannerisms but by producing from modern techniques a set of equivalents in present-day terms, keeping in the same colour range and emotional range without belonging to any date but the 1950's. This meant a related sequence of brick colours—astrigent vermilion-reds, yellows and straws, occasionally purple and black—combined with simple polychrome and raised and embossed brick patterns, techniques which the builders found as enjoyable to put up as to look at. At the same time the type elevations were altered to become crisper and harder, rooflines and grouping became more complex, with gables of different pitches used in one terrace, as at Aldeby, and the use of crinkle-crankle screen walls, i.e. zig-zag walls that are self-buttressing and hence need only be one brick thick.

All this could add up to complexity for its own sake, formal exercises instead of houses for people. This difficulty has made Chedgrave of 1951-4 into a complicated essay which would have been admirable had it been in a town but is rather puzzling in a village, and has spoilt the total effect of the biggest estate—of 76 houses—built at Loddon in 1952-5. Here something bigger was needed, beyond the complexity of

streetlines and corners and patterned gable ends; the patterns had begun to be ends in themselves. To be fair, the site was originally to back on to the existing main street, where the effect of the complex streetlines would have been quite different. It was pushed away from the town by the playing fields of an indifferent routine-modern school. Ironically the school has won an RIBA bronze medal; the housing remains (officially) unnoticed. The temptation was overcome and the best of the latest groups (Broome, Gillingham, and additions to Wheatacre and Bergh Apton) have all the simplicity of the early sites and all the local feeling and astringent punch of the later ones, as though, having laid out all the elements and recognized all the pitfalls, the architects could select the right combination unerringly.

Now the programme is almost finished; Loddon RDC have got, for their original adventurousness, a set of council houses unequalled in the whole country. The region is more rural, more Norfolk-like, than it was in 1945; no other RD that the writer has been in could say that of itself, and he has been in an awful lot. It is vital if this sort of achievement is to happen elsewhere to understand just how the architects interpreted the local spirit. They did so in purely twentieth-century terms, using twentieth-century industrial organization, creating five or six standard types of each detail and ringing the changes on them according to the needs of each site: exactly the same technique as that which ought to be used, but rarely is, in the development of curtain walls. In doing so they have been faithful to the *genius loci* in a deeper sense than that implied by a few design clichés; it would be quite possible, starting from these basic terrace units, to produce a mid-Devon solution, soft and shaggy, or a rough gritty West Riding solution or a large-scale easy-going East Sussex solution.

It is still possible for every rural district architect up and down the country and it would make one feel much happier about the artistic integrity of the profession as a whole if there were more than half a dozen council house designers who are trying to do this.



the exploring eye

1,3,4

The rock cut churches of the bishopric of Matiane, nowadays Matyan or Motchen, in Cappadocia, have attracted the attention of travellers in Asia Minor for many centuries, and THE ARCHITECTURAL REVIEW published a study of these minute religious interiors, pierced in tall cones of rock, in February 1947. But they are not the only excavated architecture in the region, and around Urgub there are numerous examples of artificial caves used as dwellings—even in towns, where caves with fronts of constructed work were



In the towns of the soft-rock area of Cappadocia, built architecture and excavated architecture are often inextricably mixed up in the same street, the same house. This view of a part of Kerameh, near Nevşehir, shows constructed fronts on houses whose back parts are caves, and arched undercrofts that seem to be constructed extensions of the caves behind.

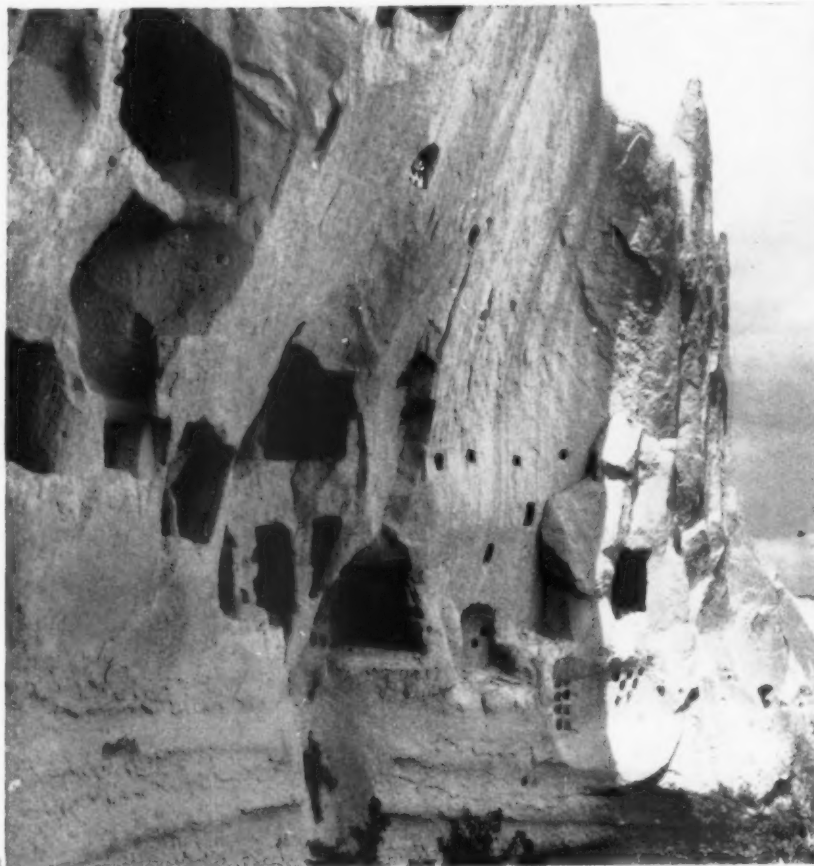
noticed in large numbers by Childs during his classic journey across Asia Minor on foot, before the First World War.

Many of these dwellings still survive, as they do in other parts of the Old World and the New, but away from the towns of Cappadocia, in the cliff faces of ravines that have been the site of troglodyte habitations since prehistoric times, there survive a more primitive type of cave-house, inhabited by a peasantry whose chief characteristics, as many travellers have noted, are their industry and neatness in agriculture, and their evasiveness as persons—both in the fields and on the cliff faces there are numerous signs of human diligence, but nothing is ever seen of the humans themselves.

5,6

The dwellings of these invisible agriculturalists—who may well be the surviving aboriginals of this much-invaded area—form an ant-heap pattern of chambers, passages and steps, cut in the soft volcanic rock of the cliffs. Lying, in some cases, only a few inches behind the cliff face, they reveal their presence only by inaccessible entrances and neat rows of window openings, except where the rock-face has weathered away and suddenly fallen, revealing the square chambers behind. Authorities agree that it must have been the need for protection that drove the troglodytes into their cliff-dwellings but whether it was for protection against human violence or the climate is not clear.

1,3,4



5.6



Shading indicates area of caves.

1, the terrain in which the cliff-dwellings of Cappadocia are to be found is as wild and forbidding as any in the world, with the soft

rock of the mountainsides carved by wind and water into forms that look like renaissance studies of drapery or the ridged curves of paper sculpture.

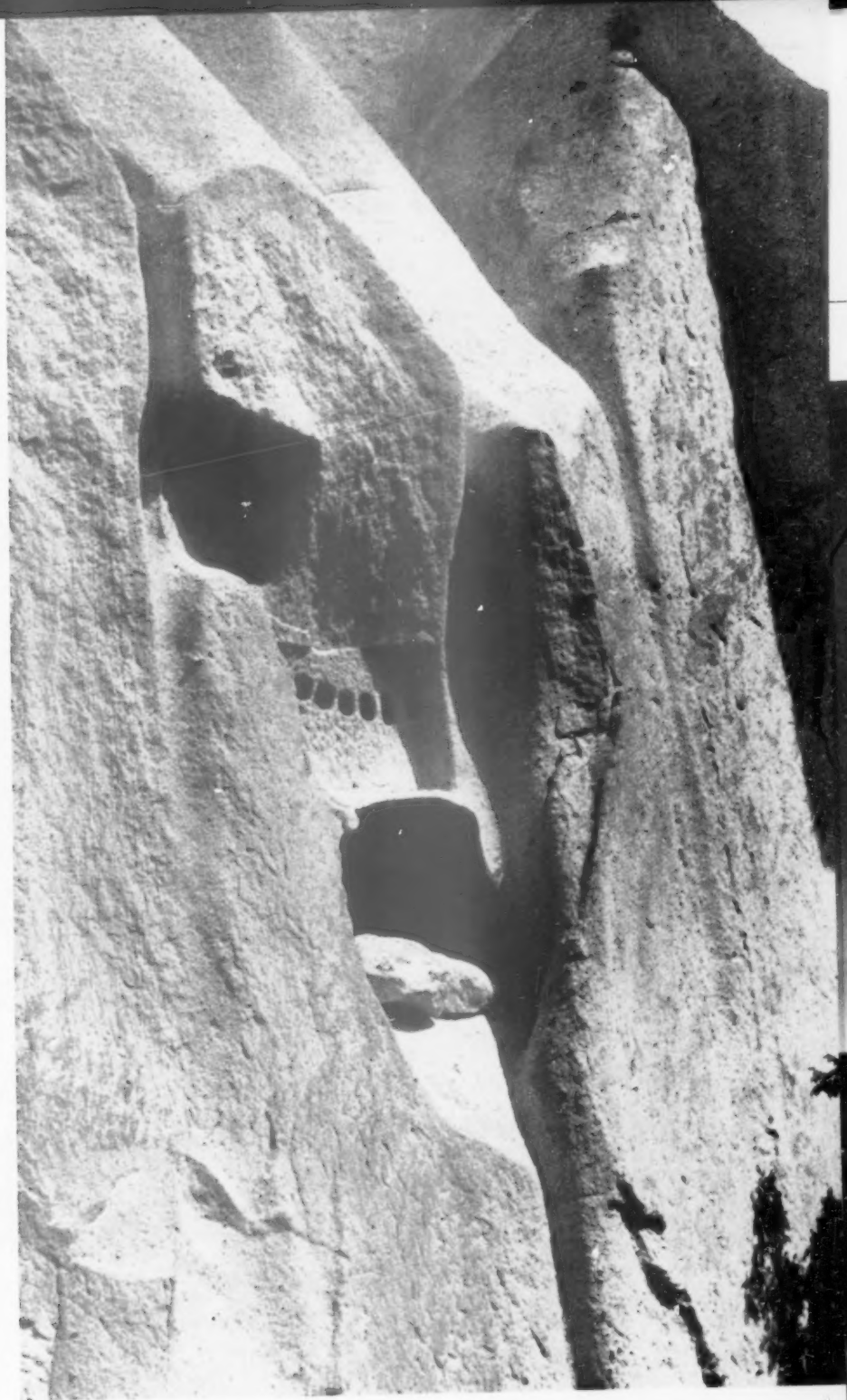
2, within the ravines are found pockets of cultivation, levelled, terraced, extended, laboriously by hand, with a neatness and ingenuity that bespeaks a tidy-minded and methodical culture, so that the regularity of form and clear sense of architectural order that appear in the openings of the artificial caves in the ravine walls

2



come as no surprise,

3 and **4**, under the shelter of the overhangs of the cliffs, however uncertain their stability, the openings of the caves take such advantage of the forms of the rock as ingenuity can devise. As often as not, however, it is clear that the terraces or areas of flat wall are the product of earlier landships that have carried away all but the back wall of a chamber and forced the inhabitants to excavate fresh habitations farther back in the cliff, making an outer



7



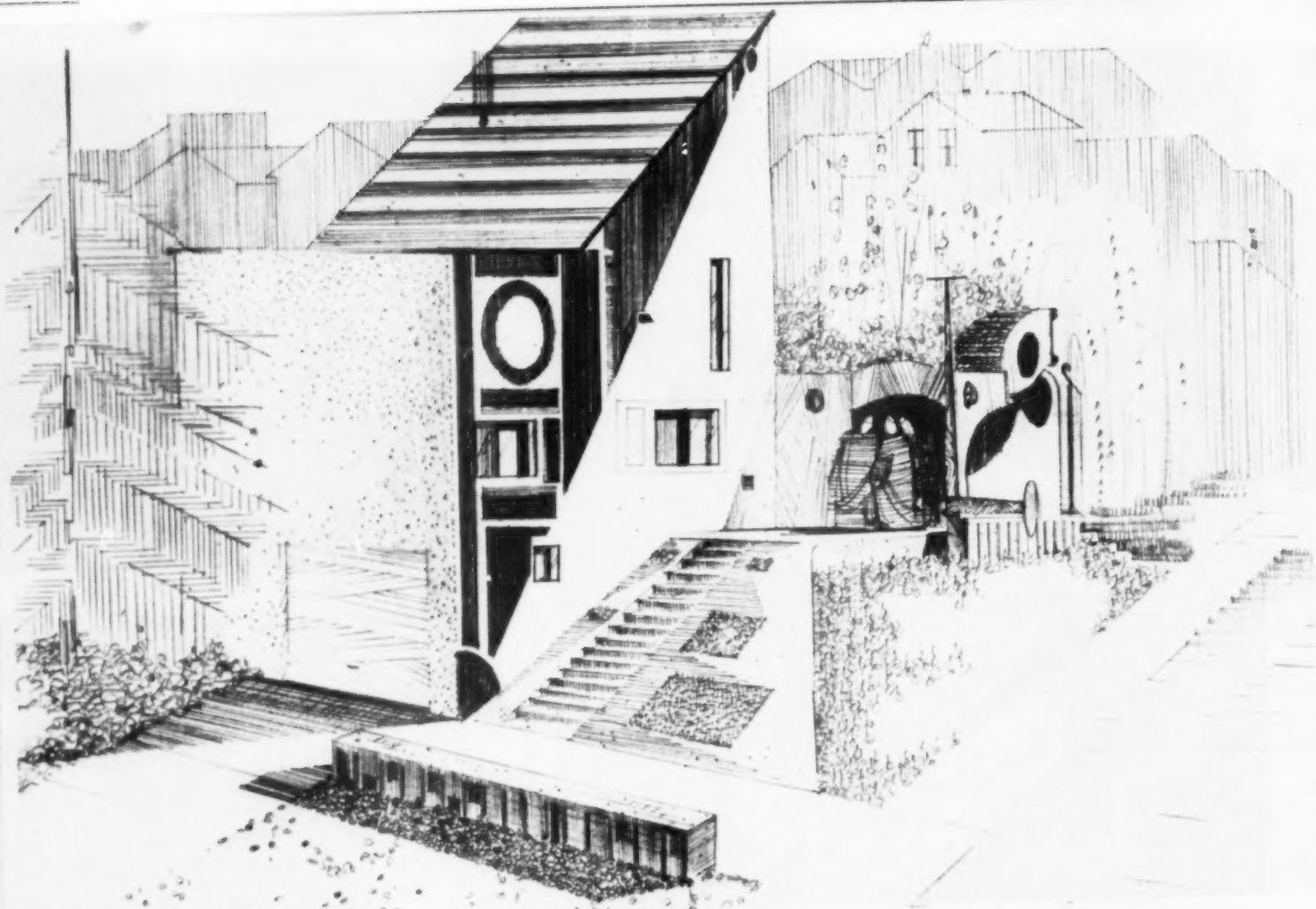
wall of an inside wall. Note where fallen boulders lie on terraces that were once the floors of hidden chambers.

5, the human figure at the bottom of this photograph gives a sense of the scale of this excavated architecture—the fallen cliff has uncovered chambers that are not mere bolt-holes, but high enough to accommodate a standing man, although their entrances are defensively small.

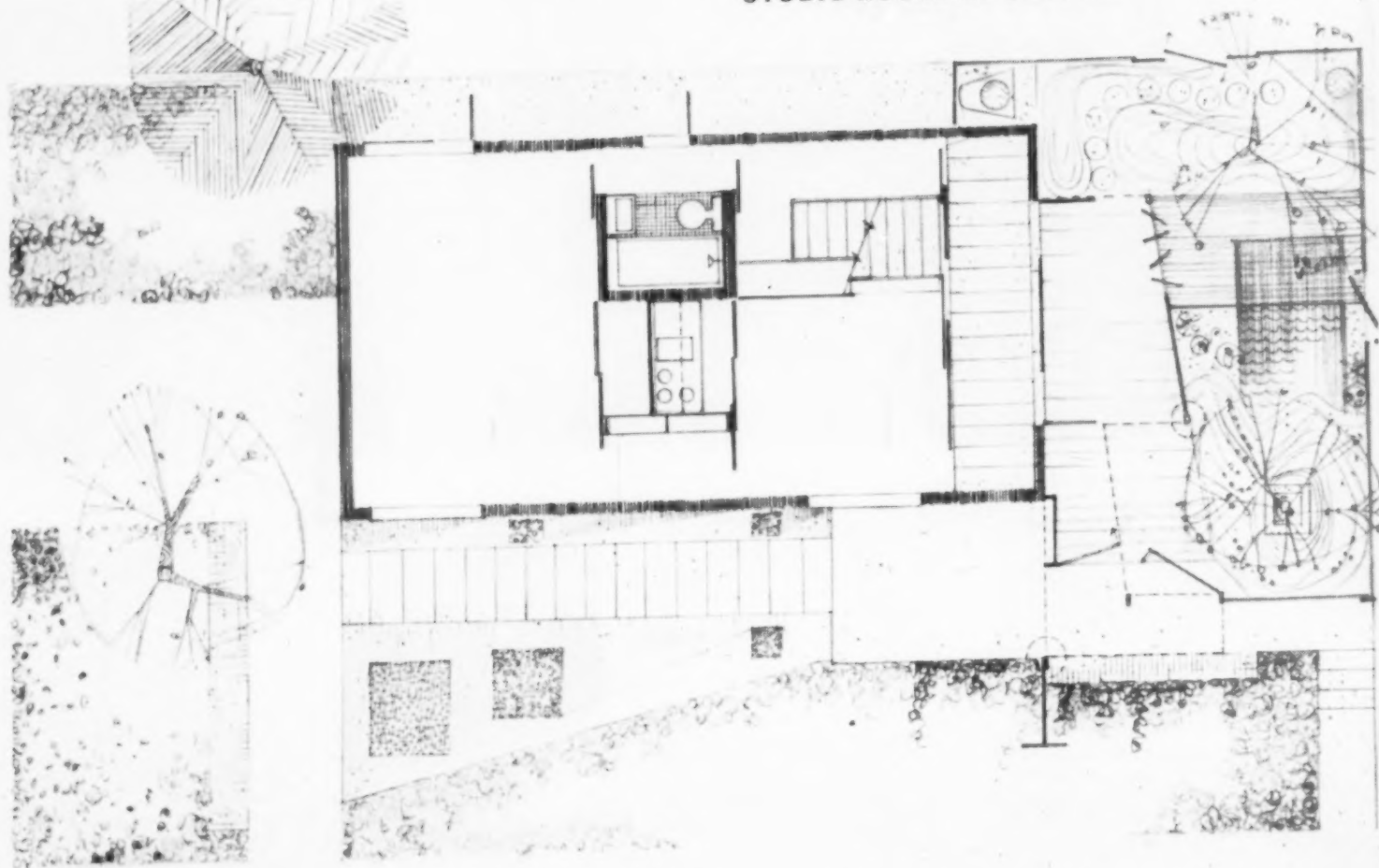
6 and **7,** the tufa in which these dwellings are cut is soft enough to

enable man to work his will on it, within the limits of stability. One must admire therefore the orderliness of minds that, armed with what are clearly only the roughest of implements (to judge from the tooling marks), persist in executing such regular forms. However, a tendency to radius the corners will be noted, a world-wide tendency when cutting or moulding in soft building materials, but a tendency that also appears with equal propriety in the most modern plastic architecture, **7.**

ential dis-
the lower
re centre
e walled
the bath-
re studio,
east end,
ey to the
ural, and



STUDIO HOUSE AT SEATTLE



STUDIO HOUSE AT SEATTLE

ARCHITECT ROBERT REICHERT



1 On the facing page, above, architect's drawing of the south front of the house; facing page, below, plan of the middle level of the house, containing conference and living rooms. 1, the studio on the top floor of the house at Seattle, with the organ which influenced the whole design. This room is used for drawing, for playing and listening to music, and as a meeting place for friends.

This house stands on a corner site in a residential district of Seattle. It is planned on three levels; the lower floor has a garage space and utility rooms, the centre level is reached by a flight of steps from the walled garden and contains a conference room and the bathroom and kitchen. The top floor is occupied by the studio, with a ceiling rising from 7 ft. to 19ft. at the east end, to accommodate the pipe organ which is the key to the whole design. Only the external walls are structural, and



STUDIO HOUSE AT SEATTLE

2, the house from the south west, with steps leading up to the main entrance and the shadow painting on the south wall, designed to give an effect of radiance even at night or on dull days. 3, the working area of the main studio, seen from the organ.



the rooms are divided by sliding wood panels. The internal walls are painted white, wood panelling is stained grey and the trim is black. The floors are of grey and black tiling, or grey-white Alaska marble, with black velvet carpeting. The studio is both workshop and music room; its walls are of vertical clapboard painted white, designed acoustically for reflection and reverberation. The structure is of wood and concrete, with exterior walls of concrete stucco and steel window and door frames. The shadow painting on the south wall was inspired by the Duomo at Florence and Santa Maria della Salute at Venice, and reflects the architect's attitude to the design and his wish that the house should symbolize his feelings for both music and religion.



4, the garden entrance at the south east corner of the house. 5, the small conference room on the lower floor.

CINEMA NEAR ROME

ARCHITECT | EUGENIO M. ROSSI



1 view of the facade.

This cinema is about 18 miles west of Rome, close to the sea and the Fregene pine grove, in an area which until ten years ago was swamp, grazed by herds of buffalo.

The cinema serves the people of the surrounding farmland as well as summer visitors. It has seating for 650, a small bar and a stage for theatrical performances. Both the structure and detailing are extremely simple,

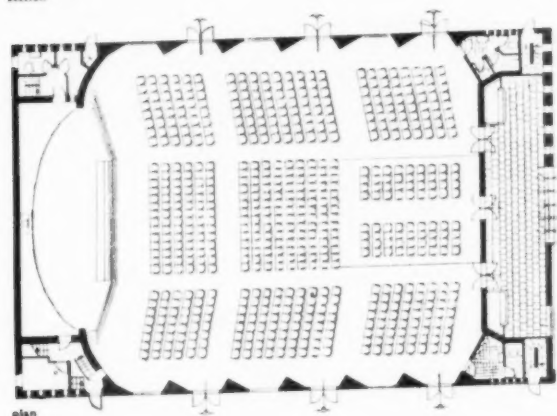
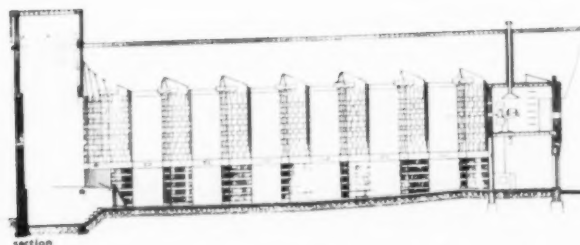
CINEMA NEAR ROME



2, the cinema from the north, surrounded by semi-tropical plants.

to keep the cost as low as possible. Ventilation is by means of electrically-operated windows in the side walls—ceiling openings have been avoided because of the heavy dew. The roof is constructed of brick vaults with tension cables across the springing, which are tensioned by a screwing device in the form of a turn-buckle in the centre. This device also houses the light fittings, which are of plastic and aluminium. The vault was constructed on movable timber formwork, allowing 13 ft. to be built at a time. At the springings of the vault are longitudinal beams which rest on the triangular piers of brick and local stone. The shape of the piers has been partly determined by acoustical considerations. No plaster is used because the atmosphere causes it to deteriorate rapidly. The asphalt roof is finished with white marble chips.

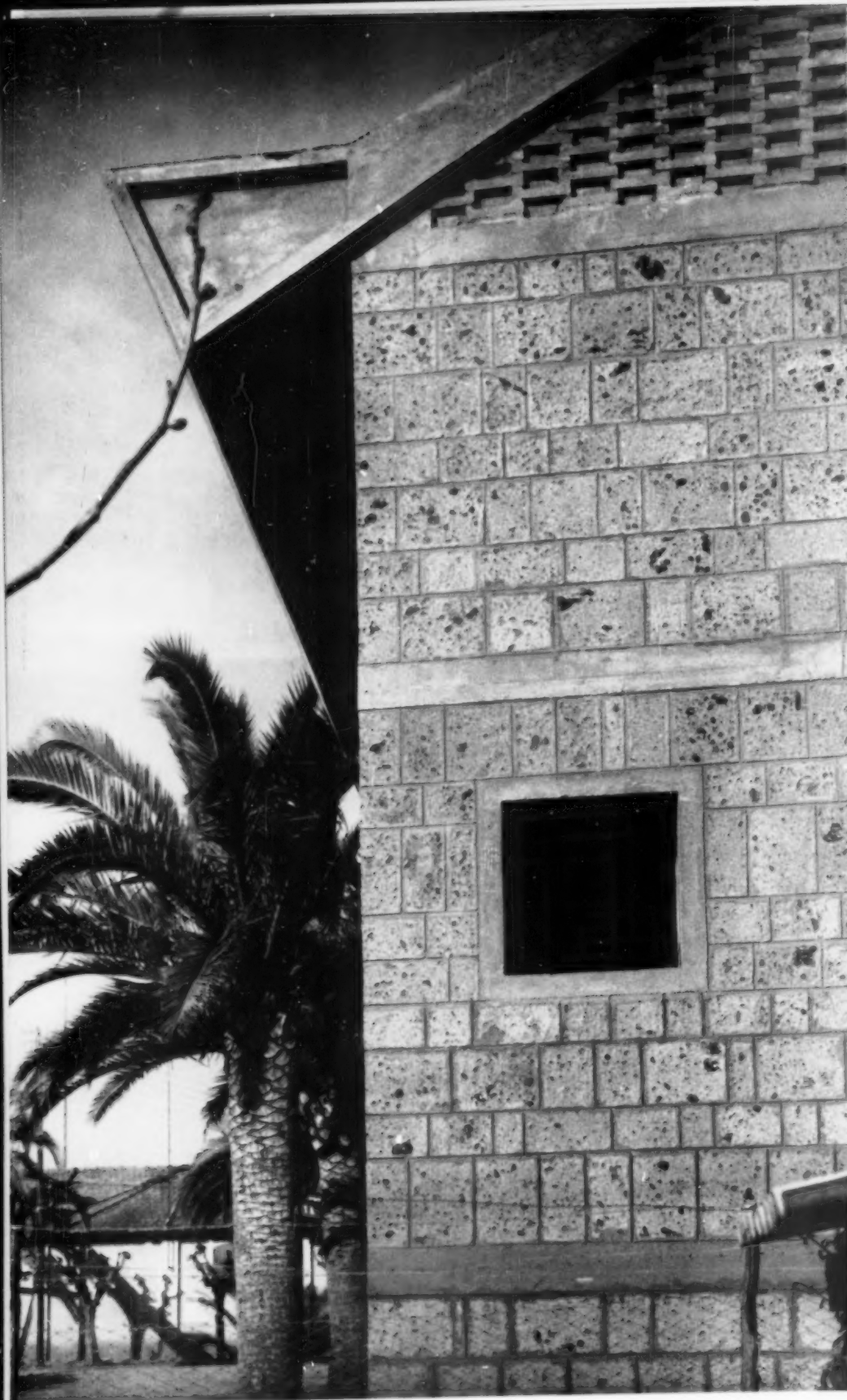
4, the wooden shutters are electrically operated and can be opened to provide extra ventilation. 5, detail of the north-east corner of the building, showing the wooden doors and patterned brickwork.



3, the entrance foyer, showing the cash desk and a corner of the bar.

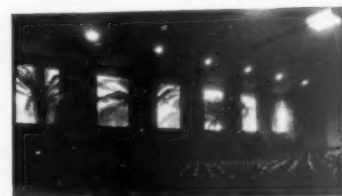






6

6. a corner of the building, with eaves detail and brick patterning on the end wall. 7. the auditorium, with the side shutters open. 8. triangular piers of brick and local stone carry the roof vault.



7



8

KIRKLEATHAM



Above, church and mausoleum at Kirkleatham in the North Riding of Yorkshire.

Among the drawings by James Gibbs in the Ashmolean Museum is a design for a mausoleum.¹ The publication of this drawing² suggested a connection with the mausoleum attached to the north chancel wall of the church of Kirkleatham in the North Riding of Yorkshire. Design and building clearly correspond very closely, and yet, so far as I know, Gibbs's name has never been connected with the Kirkleatham mausoleum.

The Gibbs's design, 1, shows an octagonal building in the Baroque manner of many of his smaller works. The first stage is rusticated, with deep buttresses at the angles, and, between them, in the centre of each face, alternate deep and shallow round-headed niches, each with a prominent keystone. The second stage is of ashlar, with circular windows above the niches, and thin pilasters continuing the buttresses which are crowned by deep-bellied volutes. Above the modillion cornice, which breaks forward over the pilasters, are three set-backs, and above them a concave curve, swelling out to the overhanging lip of the next stage. This is shown only in part, but an extension of the lines gives a convincing pyramidal finish, no doubt to be capped by an urn.

¹ Ashmolean, Gibbs Coll., 11.94, undated.
² Bryan Little, 'James Gibbs,' Batsford, 1955, Pl. 24.

The interior rises to a cornice level with that of the exterior, surmounted by a dome decorated with rococo plaster panels. Below it are the windows, each with its rococo plaster frame, and, underneath these, niches for monumental sculpture. These are round-headed, edged by a plain moulding, and alternately large, extending from the ground to just below the windows, and small, resting on the sill.

The building differs from the design in only one important detail externally. The design shows smooth rustication whereas the building has alternate bands of smooth and vermiculate, and on the last, projecting, course of the base is the inscription, 'THIS MAUSOLEUM WAS ERECTED 1740 TO THE MEMORY OF MARWOOD WILLIAM TURNER ESQUIRE, THE BEST OF SONS'. The roof is, in fact, an octagonal pyramid, capped by an urn, and with panelling resembling that on the spire of S. Biagio in Montepulciano, which has been indicated as a source of Gibbs's style.³

Internally there are more considerable differences, accounted for by the rebuilding in 1839⁴ when the same materials were used but delicate

³ S. Lang, 'James Gibbs,' ARCHITECTURAL REVIEW, Vol. CXVI, July, 1954.
⁴ Recorded on the west side above the cornice.

plasterwork would be destroyed. The walls are now rendered in cement, scored to represent masonry, with a single rosette in the centre of an otherwise plain dome. Three large and two small niches are filled by monuments. The arch occupying the fourth large niche leads, by way of a short descending passage, to the church, and was almost certainly intended to be open. It is now closed by a crude door.

In addition to this striking similarity, other facts suggest Gibbs as the possible architect. The history of the family which built the mausoleum shows that it was one such as would employ an architect of note, and was so to employ Carr and Chambers in the rebuilding of the hall. As we shall see, circumstances favoured the choice of a metropolitan architect when Marwood Turner died.

The Turners of Kirkleatham were of more than local importance. They were intimately connected with London, and, therefore, the fashionable architecture, from the seventeenth century onwards. Sir William Turner, Kt., made a fortune as a wool-draper in St. Paul's Churchyard, and was Lord Mayor of London in 1664.⁵ He was a friend of Sir Christopher Wren, and his account book shows that he contributed to the rebuilding

of St. Paul's.⁶ His elder brother, John Turner (1613-88), was a Serjeant-at-Law, and, as his monument⁷ in the chancel says, '... very eminent in his profession ...'.⁸ He married Mary Pepys, cousin of the diarist, and Pepys, who was proud of his grand relations,⁹ was a frequent visitor at their house in Salisbury Court. He thought Serjeant Turner '... a worthy, sober, serious man ... I honour him mightily ...'¹⁰ applied to him for legal advice,¹¹ and worshipped in his pew in Temple Church.¹² Their second daughter married the son of Sir William Hooker, Kt., Lord Mayor of London. John Turner's grandson, the builder of the mausoleum, Cholmley Turner (1685-1757), a near contemporary of Gibbs, was one of the two Members of Parliament for the County of York returned in the elections of 1727 (two), 1734 and 1741, during Sir Robert Walpole's long ministry, and was thus in London at the peak of Gibbs's career.

The fact that Gibbs was a High

⁵ W. Hebditch, 'A Short History of Kirkleatham,' privately printed, Redcar, 1930.

⁶ A life size figure in his robes of office, unsigned.

⁷ From his monumental inscription.

⁸ A. Bryant, 'The Man in the Making,' p. 58.

⁹ Pepys' 'Diary,' Jan. 27, 1669.

¹⁰ Bryant, op. cit., p. 160.

¹¹ Pepys, 'Diary.'

Tory, and Chalmers Turner a fervent Whig who had '... so warm and passionate a veneration for the memory of King William that he never omitted the celebration of the Fourth of November with the greatest solemnity ...' in no way rules out Gibbs as a possible architect. Apart from his success in the 1720 St. Martin-in-the-Fields competition, Gibbs had many of the great Whigs as patrons. He built the Orleans octagon for James Johnson, Whig Secretary of State for Scotland under William III; he was at work at Sudbrooke Park for the 2nd Duke of Argyll in 1726-8, at Stowe for Lord Cobham from c. 1726 c. 1740, and he altered the design of the roofs of the pavilions at Houghton for Walpole himself between 1722 and 1730. In 1728 his 'Book of Architecture' was published with a dedication, not to Harley, as might have been expected, but to the Duke of Argyll. Both Chalmers Turner and James Gibbs had excellent precedents for co-operating with the other party.

At the time, then, when Chalmers Turner was in London for the Parliament of 1734, Gibbs had completed, or was engaged on, work for these powerful Whigs, not least the Prime Minister, and it is not unlikely that it was then that Gibbs was suggested to him as a suitable architect for the mausoleum. That Gibbs was known to Chalmers Turner as early as 1728 is proved by the appearance of the latter's name in the subscription list of the 'Book of Architecture,' and this would certainly influence his choice of an architect. Gibbs did in fact design a 'large house' for Chalmers Turner, presumably for Kirkleatham, and not built.¹³

Like so many of his century and position, Chalmers Turner spent much of his time and wealth on the improvement of his estates. From the land-owning Turners of the seventeenth century (with younger sons engaging in trade) were descended the humanitarian, cultured eighteenth century Turners, making the Grand Tour, indulging in philanthropy, employing Carr of York to rebuild their Jacobean house (as they later employed Sir William Chambers to alter Carr's house), improving their park with temples and follies, endowing a school and housing it in a great building in the manner of a provincial follower of Vanbrugh, enlarging the Hospital and adorning it with an exquisite chapel,¹⁴ and rebuilding the village and church. Finally a rash of toy forts and embattled gatehouses, including a 'fortified' outer court to the Hospital, dotted the village.

Such activities, together with Chalmers Turner's evident (allowing for the customary excesses of the eighteenth century epitaphs) deep grief at the death of his only son,¹⁵ prepare one for a progression from the wall monument, even if by a London sculptor¹⁷ which had satisfied his ancestors, to a more ambitious memorial in which he could honour not only his son, but his whole family.

Examination of the Kirkleatham parish records disclosed a bundle of

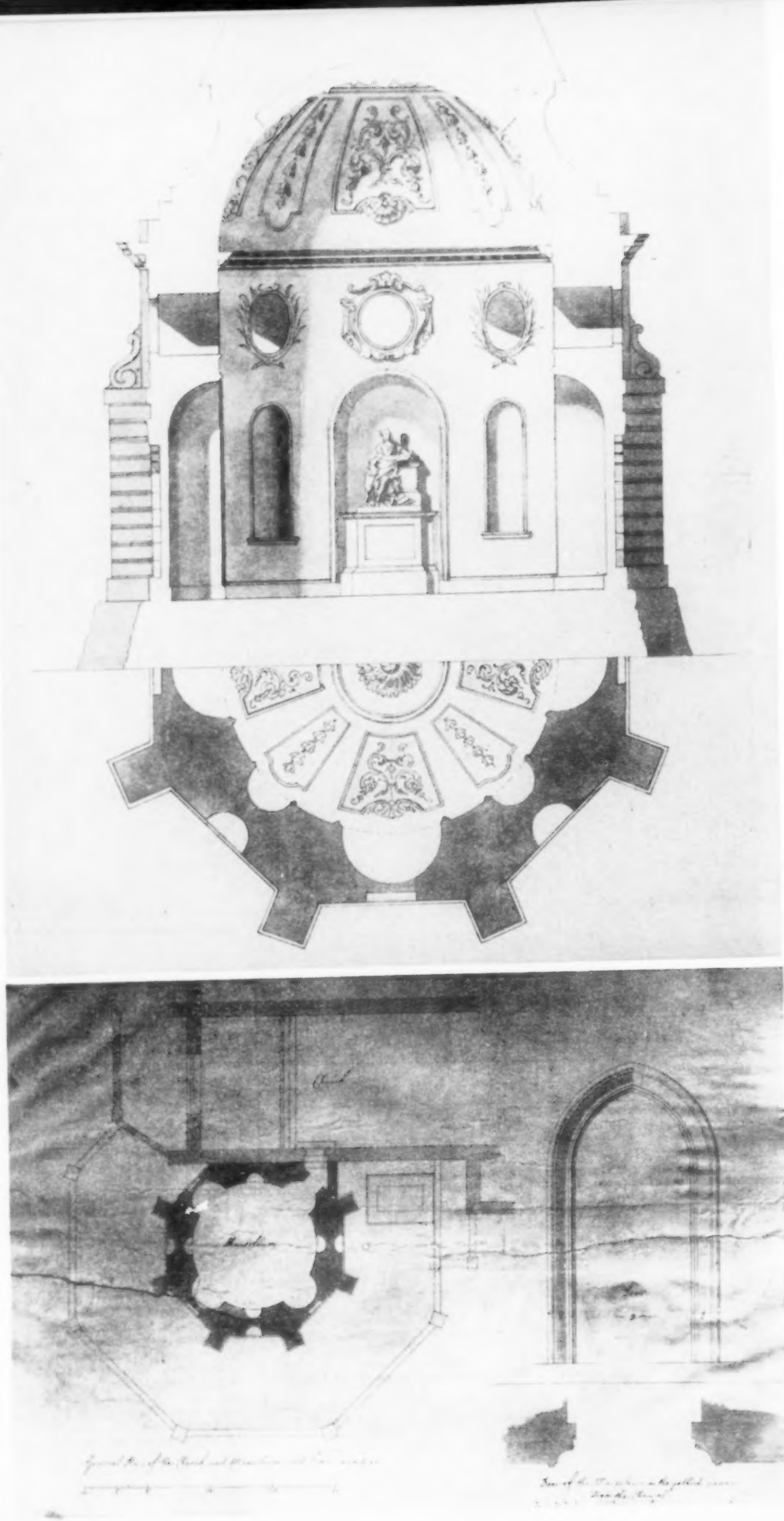
¹³ From his monumental inscription.

¹⁴ Ashmolean, Gibbs Coll., IV, 23.

¹⁵ Mr. Howard Colvin has suggested that Gibbs was also responsible for the design of this chapel.

¹⁶ One daughter alone survived him, one son and one daughter dying in infancy.

¹⁷ I.e., the monument on the north wall of the chapel erected by Sir William Turner to his mother, Elizabeth Countess of Arundel (159, c. 1655), undated, by Joshua Marshall of London. The monument to John Turner is of the finest quality, and is probably the work of a London carver.

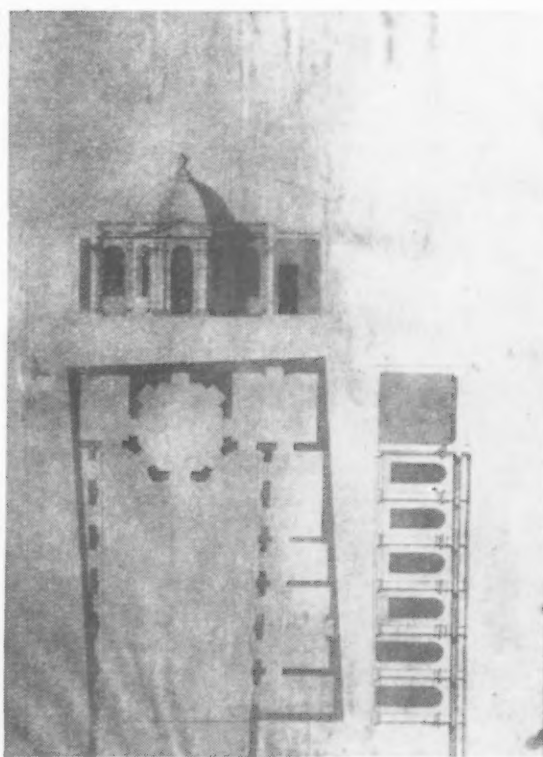




3



4,5



- 1, on the facing page, James Gibbs' design, now in the Ashmolean Museum, for a mausoleum; an exact copy of this drawing in the Kirkleatham parish records suggests that Gibbs was the architect of the Kirkleatham mausoleum.
- 2, on the facing page, another drawing from Kirkleatham, also probably by Gibbs, shows the plan of the mausoleum in relation to the earlier mediæval church.
- 3, Scheemaker's drawing for the monument to Marwood William Turner, flanked by allegorical figures of wisdom and learning.
- 4, the gothic door, shown in plan and elevation in 2, seen from the rebuilt church. It has an open based pediment surmounted by an urn, which is not on the original drawing.
- 5, plan and elevations, also preserved in the Kirkleatham records, for a much more ambitious mausoleum with a forecourt and a series of small rooms as well as the octagonal, domed mausoleum. This design was rejected in favour of the present, smaller building.

five designs and one document, all of the eighteenth century, relating to the mausoleum. All the designs are highly accomplished drawings in ink and wash, and the most important of them, an exact copy of that in the Ashmolean, proves beyond reasonable doubt that the Kirkleatham mausoleum was designed by James Gibbs.

Gibbs was perhaps commissioned in 1735. This, or the years immediately after, are the most probable date for the design, for Gibbs was at this time occupied with buildings in which octagon and pyramid play an important part. The Boycott pavilions were built at Stowe c. 1730, and, before they were altered by Signor Borra, had pyramidal roofs crowned by urns,¹⁸ closely resembling that of the mausoleum. Another of the Stowe pavilions¹⁹ has angle buttresses surmounted by heavy volutes, and plates 77 to 81 of the 'Book of Architecture' give further examples of the use of the octagon. Had the Ashmolean drawing been of a date earlier than 1728 it would probably have been published in this collection.

Gibbs expected his books to be used as source books and claimed that the designs could '... be executed by any workman who understands lines ...'. He travelled little in later life and a copy of his design would be sent down and a local mason (the parish produced one competent to design the new church thirty years later,²⁰) entrusted with the building. The mason may in this case have been responsible for the addition of the vermiculated rustication.

Of the other designs two are connected with the mausoleum and appear to be by Gibbs. The first, 2, gives the plan of the mausoleum in relation to the mediæval church and shows that the passage from the chancel has been altered, probably when either the church or the mausoleum was rebuilt. The doorway at the chancel end, a plan and elevation of which are inset in the design, is still however in position, 4. It is, as the inscription says, 'in the gothic manner,' and was no doubt intended to harmonize with the pre-1763 church, which, from the Knyff engraving of c. 1708, seems to have been of the fourteenth and fifteenth centuries. Above the door, but not included in the design, is an open based pediment supported on brackets, surmounted by an urn and with putti reclining on the sides. It is in the style of Gibbs rather than of the present church.²¹ The inscription on both this design and on that adopted have the letters formed in a similar way, which they both share with those on other Gibbs designs, notably that for Matthew Prior's house.²² The capital P's in all three are identical, while the capital D's are common to the last two and the capital M's to the first and last. Since the drawing technique is also similar this plan, too, may be ascribed to Gibbs.

The second design is a plan and two elevations for a mausoleum and forecourt, probably rejected in favour of the present building, 5. It is an ambitious design, the forecourt, a series of small rooms on one side,

¹⁸ 'Book of Architecture,' pl. 76 and Laurence Whistler, 'The Authorship of the Stowe Temples,' *Country Life*, Sept. 29, 1950.

¹⁹ 'Book of Architecture,' pl. 75.

²⁰ Robert Corney of Coatham, c. 1704-71. Corney may have worked from designs of Carr who supplied a design in 1759 (see below).

²¹ c.f. the rejected design for the Goldton monument, Ashmolean, Gibbs Coll. 11.52, and the chimney-piece in the Orleans octagon.

²² Bodleian, Gough Maps 46, No. 260.



6, Chalmley Turner's monument by Sir Henry Cheere.



7, the central figure from Marwood Turner's monument, shown in the drawing, 3.

leading to an octagonal, domed mausoleum. The bays are pilastered and the building is turned entirely inwards into the court, the outer walls being quite featureless. The design, meticulously drawn, is characteristic of Gibbs and details of it are comparable with plates in the 'Book of Architecture.' The fourth of these architectural drawings, the only one in which coloured washes are used, is a design for rebuilding the church which was never executed. It is of a later date than the mausoleum designs, for there is a note explaining the adaptation of the chancel roof to allow light to reach the windows of the 'vault' and may be the 'draft' for which John Carr was paid in March, 1759.²³ The general proportions are similar to those of the existing building and if it is Carr's design it is possible that some objection was found to it and Corney built the church while at the same time retaining Carr's arrangement. None of these designs is signed.

Similarly Chalmley Turner went to London for the sculptor of the monument which stands in the

²³ The amount, £24 2s. 6d., is recorded in William Turner's account book.

mausoleum, and Scheemakers, who, with his Westminster Abbey monument of 1740 to Shakespeare "... effectively established his credit and reputation and at the same time obliterated in some degree that of Rysbrack ..."²⁴ carved the life-size figure in the same year, 7. The long inscription records that "This monument was erected ... to the memory of Marwood William Turner whose remains lie here entombed conveyed to Kirkleatham from Lyons in France where he died on Oct. 10th 1734 in the 22nd year of his age on his travels towards Italy in pursuit of knowledge and improvement ...". The fifth design in the parish records is Scheemakers' drawing for this monument, 3. In addition to the surviving statue of Marwood Turner are drawings for two allegorical figures, *Studio* and *Sapientia*,²⁵ a coat of arms, 8, now over the entrance door and swags of foliage, the broken fragments of which are in the mausoleum. The design is signed, and with it is Scheemakers' agreement specifying the details of the monu-

²⁴ Verelst, quoted in Gunnis, 'Dictionary of British Sculptors.'

²⁵ Not, however, referred to in the contract.

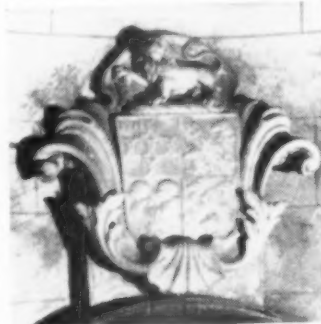
ment and including a receipt for the £72 'in my hand' and the £128 to be paid when the work is finished. He records that the monument will be sent by sea to Stockton and adds a further receipt for £13 7s. 6d. for horses for himself and his man to come to Kirkleatham to set up the statue. An addition of October, 1742, records the completion of the payment.

Chalmley Turner's own monument, a life-size figure in Roman dress, is by Sir Henry Cheere.²⁶ 7. Westmacott's monument of 1810 to Sir Charles Turner, which includes a life-size figure of a weeping woman, fills the third large niche. The other monuments, except for Sir William Turner's large armorial table tomb occupying the centre of the floor,²⁷ are less ambitious: a simple Greek sarcophagus and a draped urn of the early nineteenth century. The floor is paved in part with inscribed stones including those of Chalmley Turner's parents.

I am indebted to Mr. Howard Colvin for reading the draft of this article; for drawing my attention to Gibbs's design for a house for Chalmley Turner in the Ashmolean and for other advice; and to Mr. Rupert Gunnis and Mr. David Burder for supplying proof of Sir Henry Cheere's authorship of Chalmley Turner's monument and other information contained in William Turner's account book.

²⁶ The payment of £262 to Cheere is recorded in William Turner's account book on Dec. 28, 1761.

²⁷ Moved there from the chancel. It had previously stood outside the north wall of the church, in which position it is shown in Fig. 7.



8, the coat of arms from Marwood Turner's monument is now over the entrance door.

ID

a monthly review of interior design



1. the mural on the wall at the end of the long distance counter.

Offices for Air France, London, W.1

designers: Charlotte Perriand, in association with Thomas and Peter H. Braddock



2

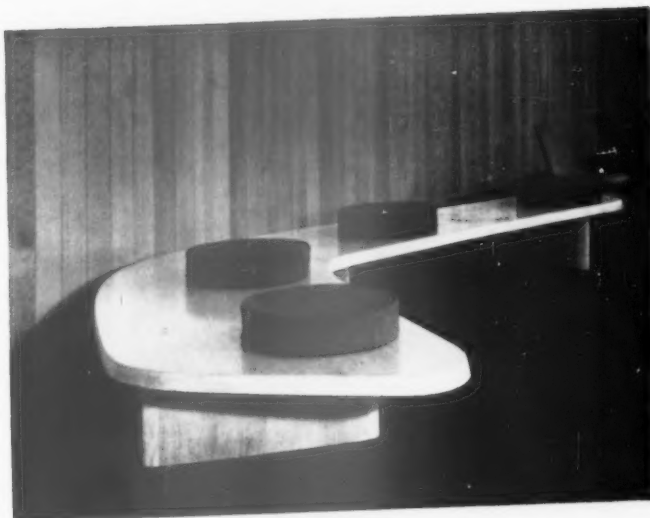
The conversion of these premises at 158 New Bond Street to a ticket agency involved the replacement of the original shop front, the construction of a suspended ceiling finished in acoustic plaster and the complete installation of new fittings, lighting equipment and finishes.

2. cellular partition dividing the long-distance counters section from the manager's and secretaries' offices. It is constructed of aluminium plates threaded on to vertical steel rods and has horizontal wood shelving placed at standard intervals. This is a patent type of construction developed by Mme. Perriand. Of the numbers of compartments thus formed some are open to the front, some to the rear and

some have openings on both sides. The interiors of those which are not completely open are sprayed with black flock and lit by concealed fluorescent lighting tubes on each side so that objects can be displayed brilliantly lit against the black background.

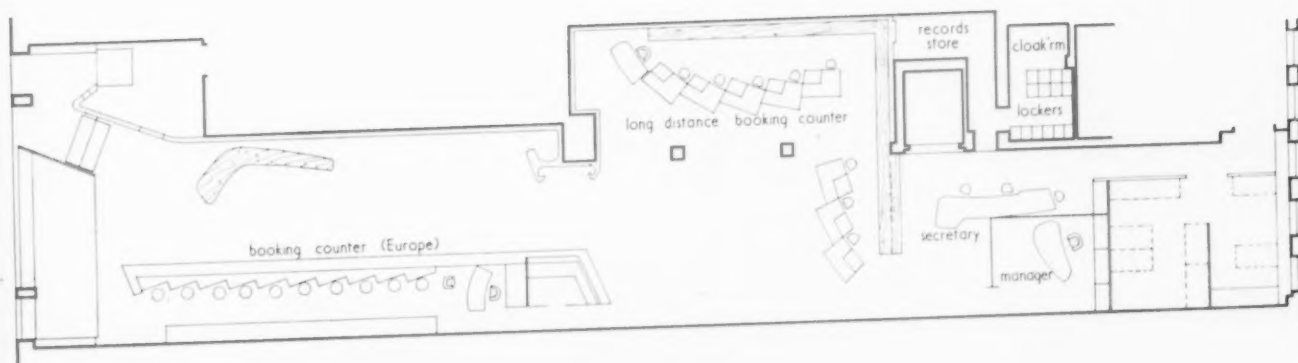
3. reception area with wall of vertical soft wood boarding. The carpet is dark charcoal grey, and the bench is French spruce with rubber foam cushions.

4. the counters for the sale of long distance tickets arranged in echelon formation. They comprise two table levels faced with black linoleum on top and white plastic on the lower, incorporating drawers, filing cabinets, and internal and external telephones.



3

offices for air france, london w1



4



Offices for Air India, London, W.1

architects: Alexander Gibson, Philip Lucey
(Design Research Unit)

These premises at 17/18 New Bond Street occupy the ground and sixth floors. The booking office on the ground floor has frontages to Bond Street and Clifford Street with a main corner entrance at the junction of these streets; the administrative staff are accommodated on the sixth floor.

5, large mural decoration on one wall of the showroom depicting an Indian village scene specially painted by Professor Bendre, professor of painting at Baroda University. In front of this is the waiting area with easy chairs and occasional tables enclosed by an open timber screen with glazed ceramic spacers.

6, the adjacent wall to 5, which has the booking counter served by four receptionists and a counter supervision position at the end. It is constructed of Indian silver greywood and has leather insets on the top and panels to the front. The counter is lit with four large polished copper reflectors and copper bracket light fittings are used on the columns and screen to light the ceiling. Behind the counter is a storage fitting faced in laminated plastic, containing a conveyor belt system which transfers booking cards between the counter and offices behind. The decorated plaques mounted on these panels represent Indian groups and were designed by M. F. Husain.

7, one of the four large polished copper reflectors used for lighting the counter.

8, the ceiling extending over the booking office and part of the senior staff offices behind, of handwoven Indian silks stretched on timber panels, which are hung clear of the existing structural ceiling and allow the passage of radiant heat from the ceiling panels above.

9, section of glass screen on cashier's desk.

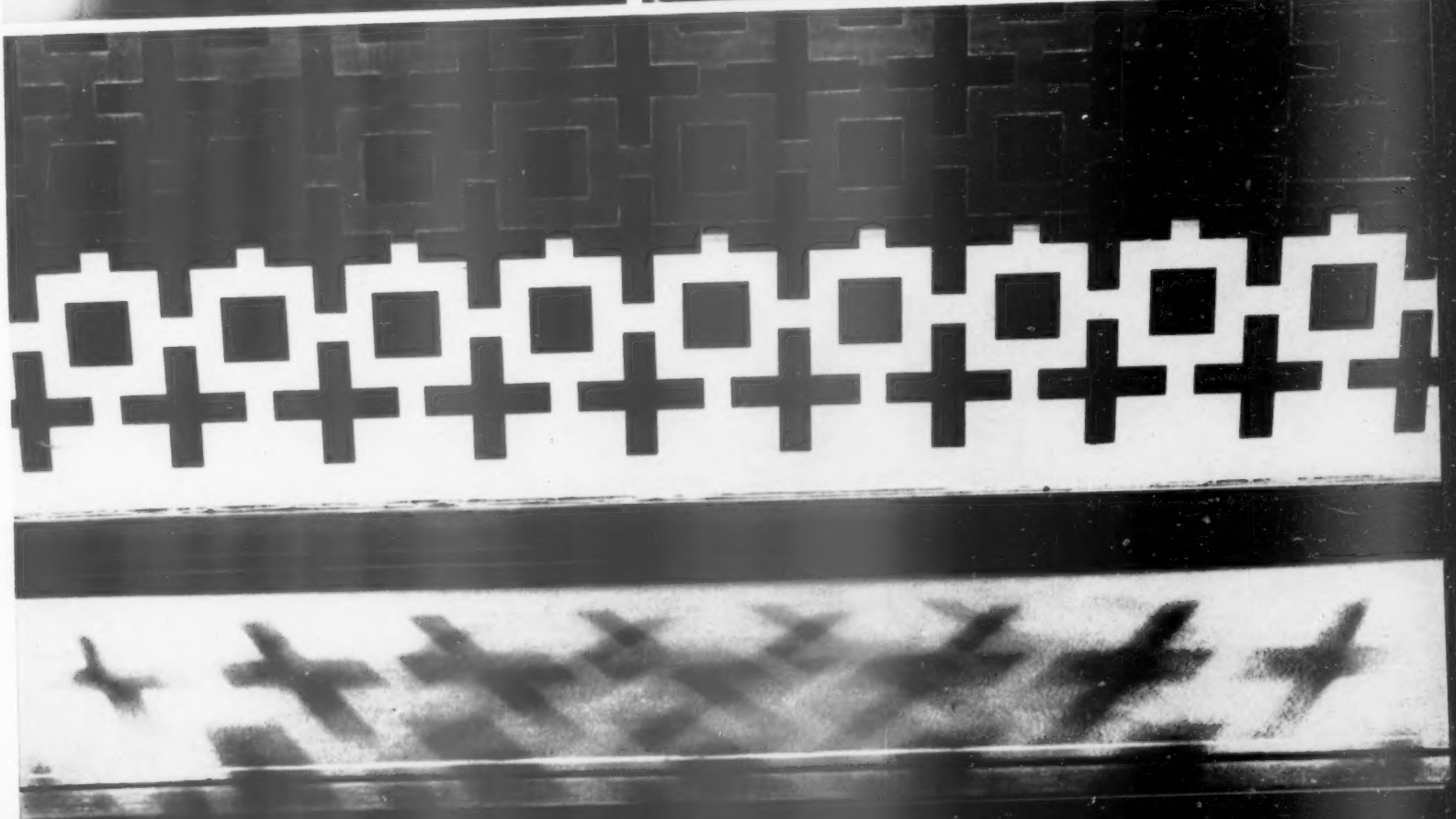
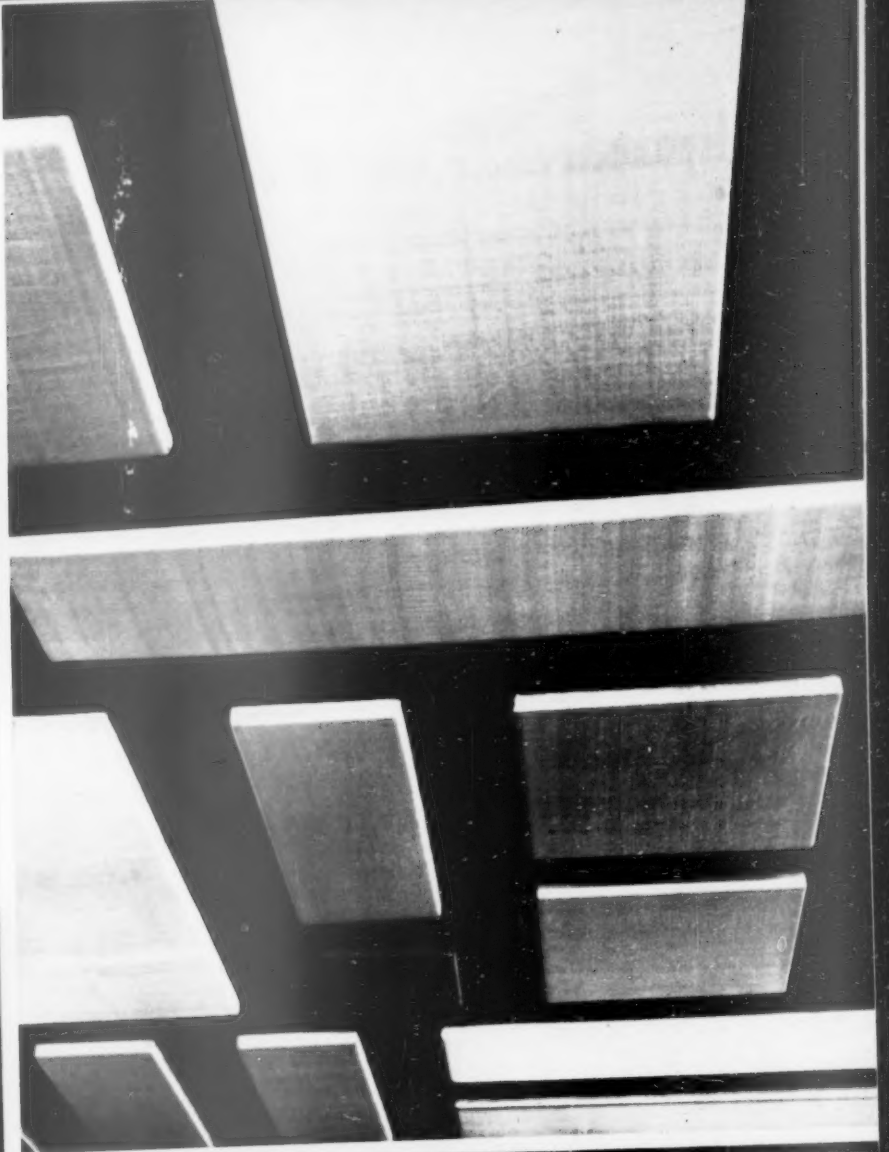
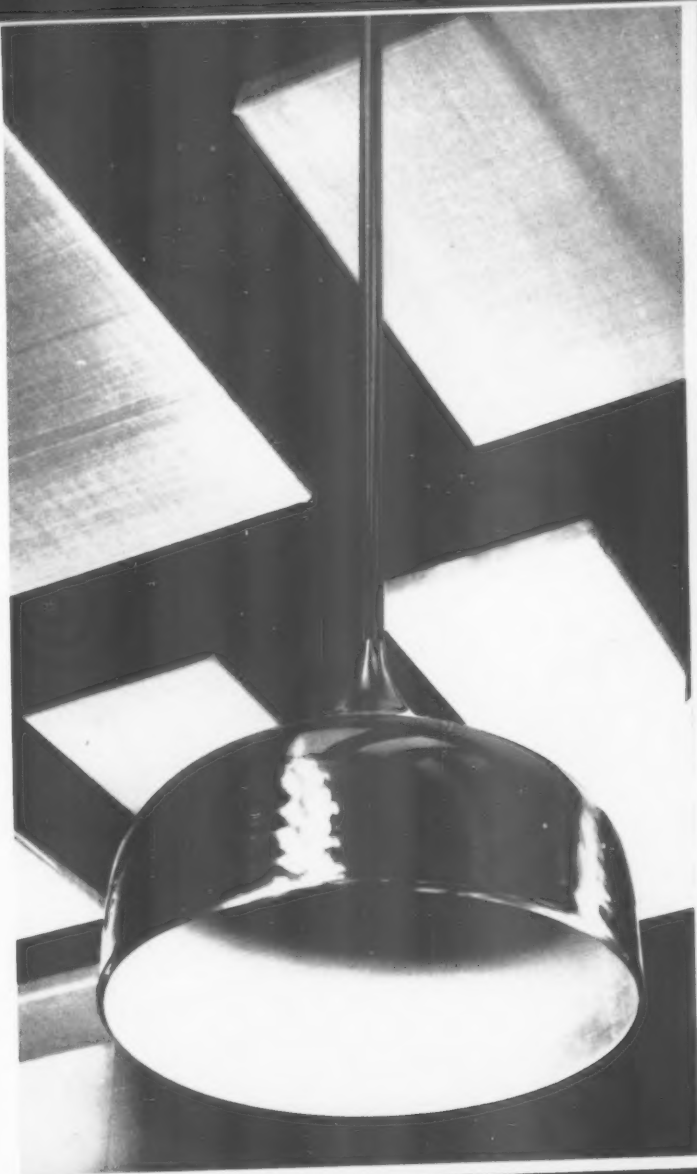


5



6

7 8
→
9





DR

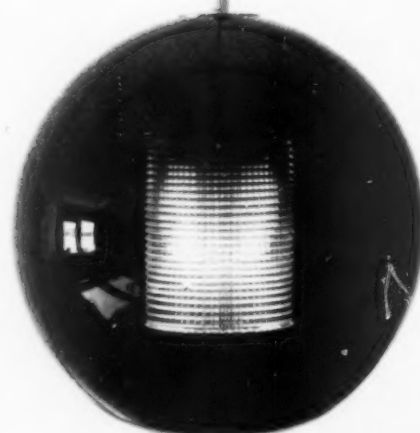
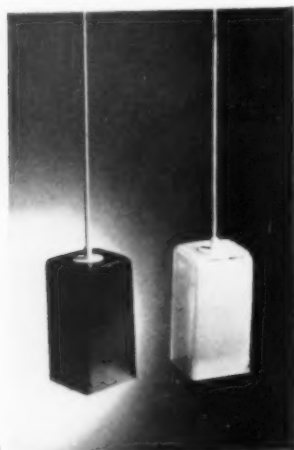
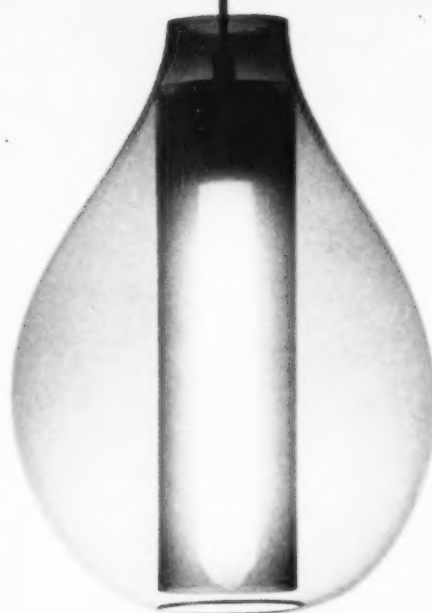
design review

light fittings: J. Wuidart and Co. Ltd., of Rathbone Place, are showing a new range of light fittings from the Orrefors Glass Factory, of Sweden. These are intended mainly to give a gentle light and hang low over furniture but they look equally well in groups or singly at ceiling height.

The high quality of Orrefors glass is well known. These fittings are made of thick handblown glass in white or dark grey-green with inner shades masking the bulbs. The range introduces a new development in the double corrugated crystal inner shades used as in 1 and 3. The inner skin is vertically corrugated and the outer horizontally, giving a rich contrast to the simplicity of the main bowl. Inner shades are also made of grey or white opal, as in 2. The shades illustrated in 4 are intended to be used in groups.

The heights of the fittings range from 6 in. to 16 in., and they take standard 40 watt or 60 watt bulbs, or candle lamps. Wholesale prices, without tax, are from 85s. 6d. to 162s.

The Orrefors factory will consider making architects' own shapes to special order for quantities.



stoneware pots: Stoneware pots by Hans Coper have been shown recently at Primavera and with other potters' work at Heals. A selection of his work, including some of the large bottles shown here, has also been sent by the British Council to the International Ceramics Exhibition at Syracuse, USA.

The most beautiful are the large sculptural pieces, 5, which, though not based on ancient art forms, have the timeless tranquillity of early Greek pottery.

They are thrown on a wheel and mostly are made from coarse white clay with surface treatment of layers of metal oxides and vitreous slip. The finishes range from smooth greyish white, as in 6, to greyish brown and black. In some, 7, black slip shows through the white to produce strong contrasting stripes. They are designed primarily to hold flowers for use in large halls, staircases and churches, but the aloof dignity and individuality of the shapes is strong enough to stand alone and unfilled in cloisters, patios or gardens.

The pots illustrated are from 12 in. to 19 in. high and prices range from about 14 to 35 gns.



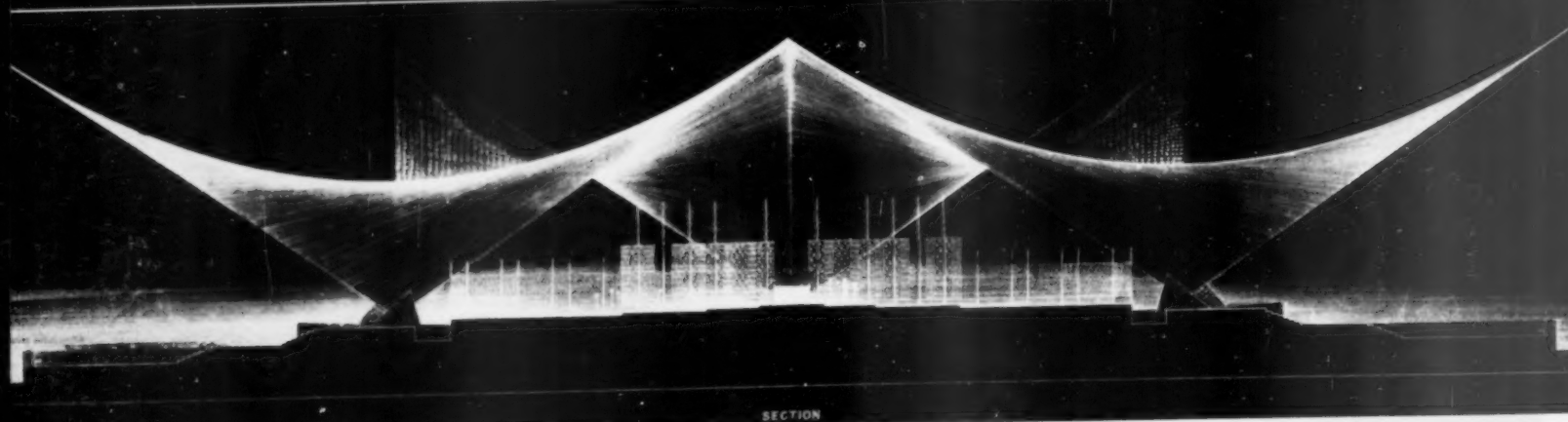
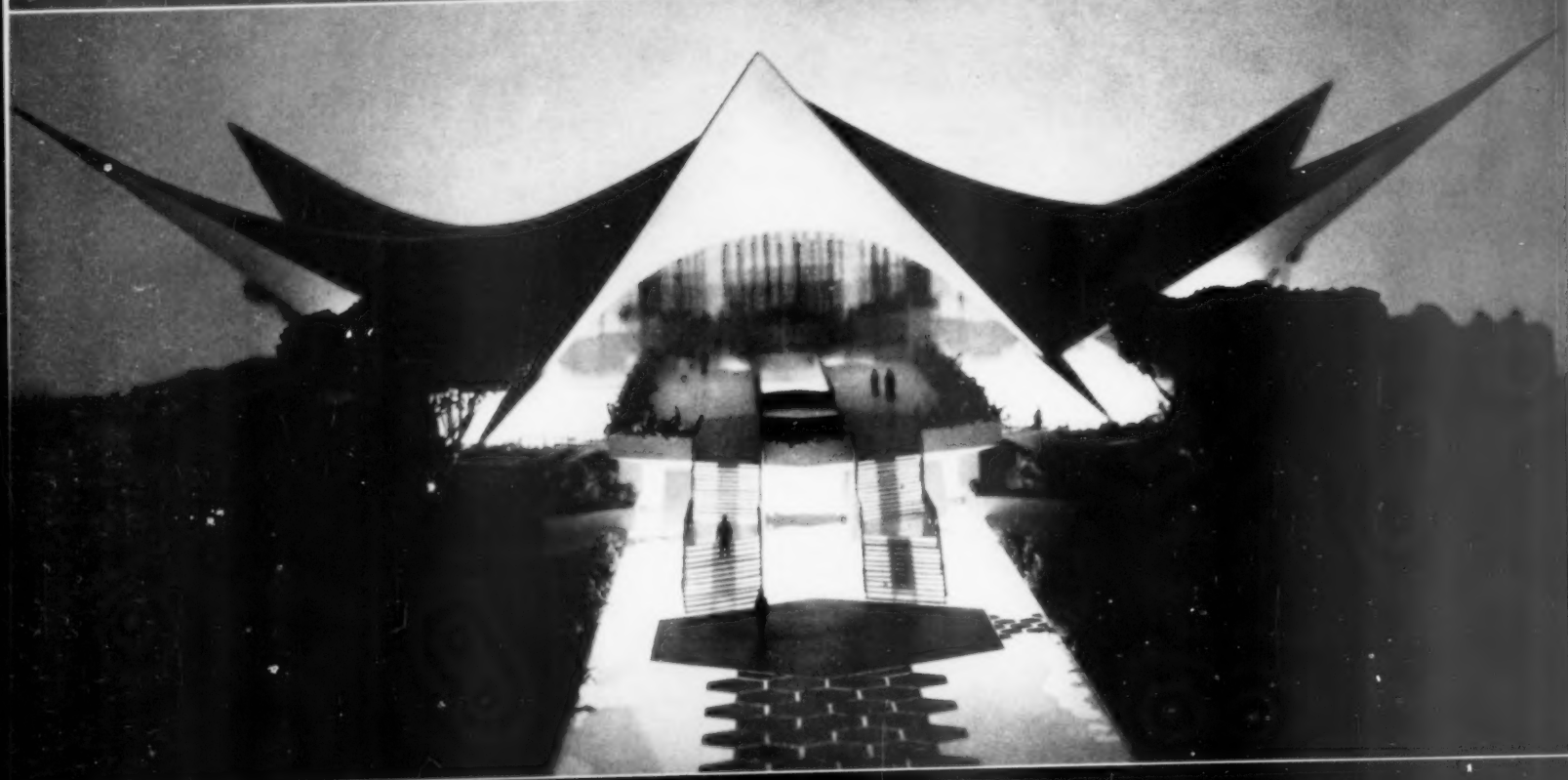
5

7



6

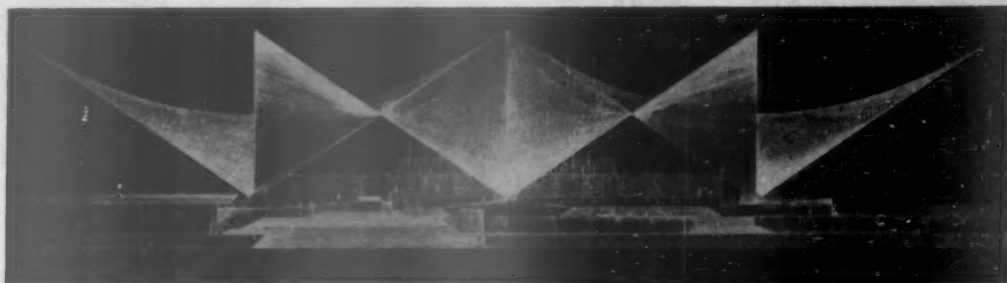




SECTION

From the north, the approach to the mausoleum is in terms of traditional monumentality, opposite, top with flights of steps ascending directly from terrace to terrace, but on the long approach from the south, an analogy is struck with traditions of Mogul monumental gardening, with a processional way passing between, and over, pools of water. Under the canopy of hyperbolic paraboloids, the processional ascent continues, as the section shows, up to the sarcophagus itself at the centre of the composition.

MAUSOLEUM AT KARACHI



ARCHITECTS
designer

RAGLAN SQUIRE AND PARTNERS
Robert B. Roberts

In the summer of 1957 a competition was announced for the construction of a mausoleum for Qaide-Azam Mohammed Ali Jinnah. The conditions called for the design of a mausoleum over the present sarcophagus of the Qaide-Azam; the landscaping and planning of roads, parking areas, footpaths and gardens within the site; the siting of the following buildings which will be erected at a later date: mosque for 25,000 persons, restaurant, shops, police station, a small post-office, guard house and lavatory for men and women. The winning design, illustrated here, was submitted by Raglan Squire & Partners. Only the mausoleum and the gardens will be carried out at the present time.

The site platform contains a sarcophagus of Mohammed Ali Jinnah and the remains of Mr. Liaquat Ali Khan. The mausoleum consists of a canopy composed of six concrete hyperbolic paraboloid forms (or saddle shapes) laid out around a hexagonal plan; the core of the plan is the sarcophagus which has a series of concentric hexagonal rings radiating from it in a descending series of levels. Thus the platform is cut back from its lowest level to form terraces and pools leading up to the climax of the inner rings; these rings are bounded by coloured anodized aluminium grilles and have floor surfaces of hexagonal marble slabs, the whole being circumscribed by the topmost pool. Large triangular-shaped abutments support the six hyperbolic paraboloids, four of which are contained within high level pools and two within low level pools, the latter pools receiving the falling water from the circumscribing topmost pools. Water is arranged as an important element in the composition of levels,

and is carried out from the centre to the special entrance to the south, where it is envisaged as a low approach-trough from the new proposed road, and as a trough connecting the mausoleum to the new mosque, the western end of which contains the minaret. This special entrance is intended as a formal approach along stepping stones set in the ascending tanks of water, ultimately rising by way of steps to the hexagonal entrance platform, which gives on to a bridge carrying the visitor at high level into the screened core of the mausoleum.

Construction of the hyperbolic paraboloid canopy is of 2½ in. concrete finish on the outside with gold mosaic tiles laid on a screed; inside, the concrete is left exposed with the marks of the shuttering providing pattern and texture. Marble is used as the floor finish within the top circumscribing pool; the rest of the pools are of stone. Night illumination has been designed to reflect the terraces and the canopy in the pools.

MAUSOLEUM AT KARACHI

The inherent six-way symmetry of the plan is polarized by the emphasis on the north-south processional axis, and by the complex multi-level circulation on the south, on which side the pools surrounding the abutments of the vault also stand at a lower level than the other four, thus creating a greater sense of opening, a more dramatic entrance. A further dynamic departure from absolute regularity is provided by the location of the subsidiary tomb, and the independent approach path to it, coming from the south-west, and passing under the raised platform of the main approach.

- key
- 1, sarcophagus.
 - 2, pool.
 - 3, tomb of Liaqat Ali Khan.
 - 4, steps up from lower level.
 - 5, women.
 - 6, men.
 - 7, bridge over pools and gardens.
 - 8, platform.
 - 9, garden.
 - 10, path to Qaid Millat.



1, the main entrance; the panels below the windows are of red cedar, and the end wall is of rustic facing bricks. The two columns on the right are faced with narrow teak boarding.

SCHOOL AT WEST DERBY, LIVERPOOL

ARCHITECT: HAROLD E. DAVIES AND SON, in collaboration with the City Architect Dr. Ronald Bradbury

This school in a residential Liverpool suburb is on a south-sloping site fringed with mature trees. It is planned in four groups; a central four-storey block containing administration rooms, laboratories and library; three-

storey classroom block, single storey workshops, and the assembly hall, kitchens and gymnasium. The main teaching rooms have access from two subsidiary staircases, to give windows on two sides of the rooms. The whole assembly

School at West Derby, Liverpool

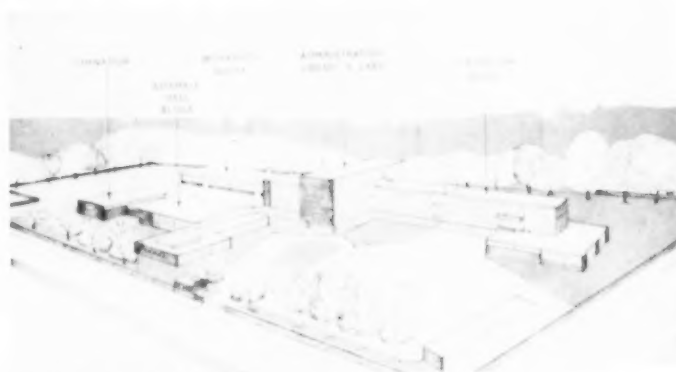


2, the assembly hall, from the main entrance.

hall group can be isolated from the rest of the school and used for public functions. The small hall can be used as a dining room, as two classrooms or as part of the main hall. The frame of the building is of reinforced concrete on a 40 in. module, with prestressed plank flooring. The main roofs are of 2 in. strawboard on concrete beams cast in situ, with a plasterboard ceiling below and finished on top with three layers of bituminous felt and limestone chippings. The assembly hall roof is carried on post-tensioned concrete bowstring trusses. The external wall-cladding is of standard metal sections with infilling of western red cedar boarding. The metal ribs of the cladding are painted black, with pivoted windows picked out in white.



3, the school from the east, showing the classroom block and the four-storey administration and library block.



4, air perspective of the school.

5, general view from the east.



OFFICES IN MONMOUTHSHIRE

ARCHITECT: FRANK SCARLETT

This block at Rogerstone is sited at an angle to the road from Newport parallel to the main factory building. The accommodation is arranged on three main floors, plus the lower ground floor at the rear of the site, and a penthouse structure above the main floor level containing the managers' dining room, kitchen and services.

The building has been designed as a series of bays 25 ft. by 25 ft. subdivided to give a module of 4 ft. 2 in. and has a frame of precast reinforced concrete stanchions spaced at 8 ft. 4 in. connected by a perimeter beam at each floor level; the central line of stanchions is cast in situ and



6, main entrance doors and staircase.



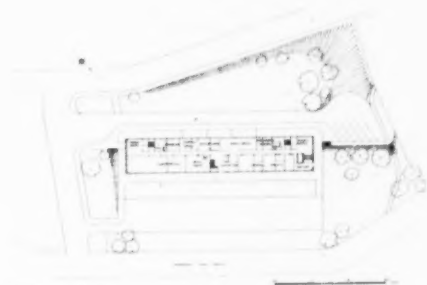
7, the main staircase, which forms the hub of the factory. The handrails are of aluminium, which is also used throughout the building for door furniture and partitions.

Offices in Monmouthshire

spaced at 16 ft. 8 in. centres. Precast, prestressed units giving an even under-surface are used for the structural floors; this allows for a free arrangement of internal partitions.

The principal facing material is aluminium glazing, consisting of continuous units 8 ft. 4 in. in width. Buff coloured brickwork is used on the ends of the front and rear elevations, while natural stone is used as a plinth to the building and to the main entrance surround.

Inside, the offices have acoustic tile ceilings and plastered walls with floors mainly of cork tile. Low pressure hot water central heating is provided by a calorifier fed by steam from the works.



upper ground floor.

HOUSE AT STRAWBERRY HILL

ARCHITECT: KENNETH WOOD



8, view from entrance drive into the front court.

9, the studio, with storage racks and etching press behind the curtain and glass screen. The exposed beams are of Douglas fir.





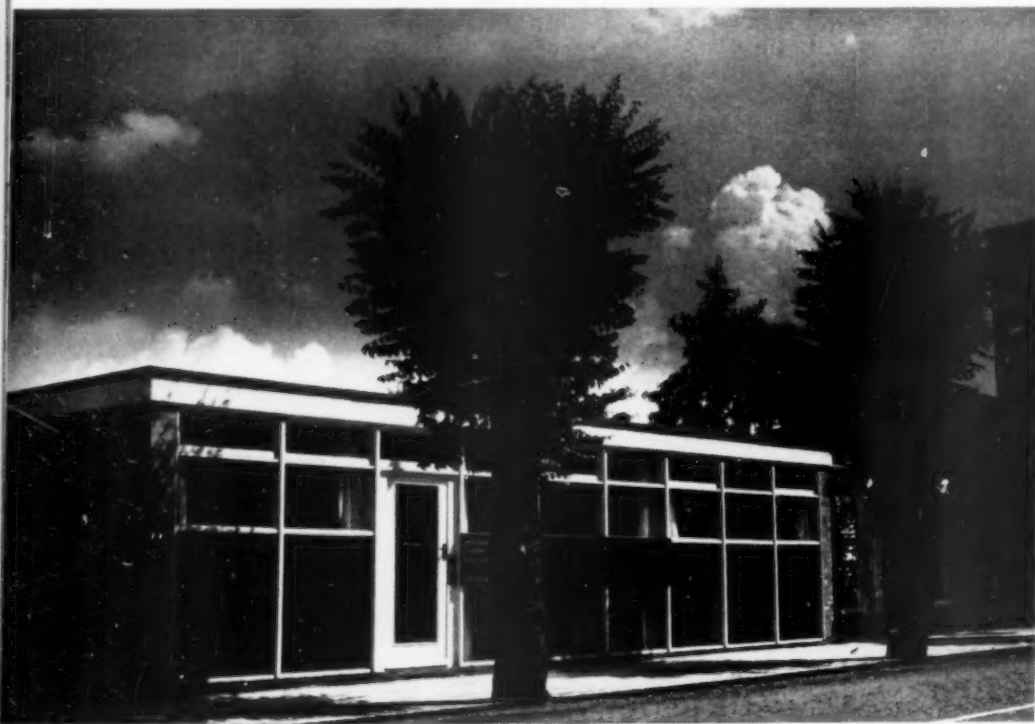
10, the entrance door with studio on the left.

House at Strawberry Hill



This single-storey house, built for an artist, is on an 80 ft. by 70 ft. plot in a large garden in Strawberry Hill. Two brick wings, one containing living quarters and the other garage and workshop, are linked by a timber framed studio with large windows facing south, north clerestory lighting and a transom height solid panel on the south side of the model couch. The two brick wings are of 11 in. cavity wall construction with an inner leaf of insulating

blocks used also for partitions. The studio is of Douglas Fir post and beam construction with infilling panels of glass or textured asbestos sheet on wood-wool slabbing. The main structural members are fully exposed throughout. Central heating is by a coke fired air system with grilles in all rooms. Running through the living quarters is a central core of cupboards and wardrobes containing a return warm air duct.



11, the office from the north west.

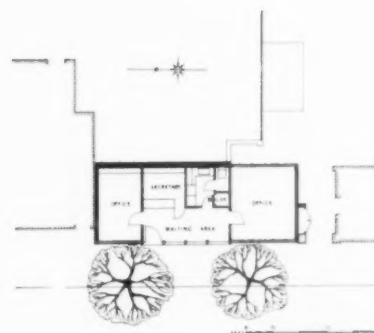
ARCHITECTS' OFFICE AT LEWES

ARCHITECTS: CHILTON WATERS AND STUTCHBURY

This office is situated in Friars' Walk, Lewes, and is planned to accommodate one partner with secretary and to have a drawing office for four with ample plan storage. It has a hall large enough to house a staircase should another floor be necessary.

In construction it has a solid concrete floor, $\frac{1}{4}$ in. screed and sprayed plastic jointless floor covering of white marble on a dark green background. The side and back

walls have 10½ in. cavity work, and the front wall has 6 in. by 3 in. deal posts at 4 ft. centres infilled with glass and aluminium faced panels painted externally and left unpainted internally. Ceilings are distempered arctic blue, grey emulsion is used for the walls and the flush doors have dark red gloss paint. Heating is provided by a small oil-fired boiler with a vaporizing unit running conventional radiators.



12, the principal's office.



BROUGHTON MOOR LIGHT SEA GREEN STONE FRAME-SAWN FINISH



at the new Central Police Headquarters, Hull.
(Architects: Messrs. Priestman & Lazenby).

Broughton Moor Green Stone is ideally suited for use both as internal and external facing, and remains sound for centuries. It can be supplied in a variety of beautiful finishes, including frame-sawn, sanded, fine rubbed or naturally riven. It was these characteristics which caused it to be chosen for the facing of this impressive building. Fixing is normally effected by means of non-ferrous cramps and dowels, grouted into drillings in the stone, and brickwork or concrete.



A section of Broughton Moor Stone, showing the distinctive appearance and texture of the frame-sawn finish.

Technical pamphlets showing typical methods of fixing are available as follows: 1, Flooring; 2, Facings; 3, Coping; 4, Cills; 5, Riven Face Slabs.

THE BROUGHTON MOOR GREEN SLATE QUARRIES LTD.

Coniston, The Lake District, Lancashire

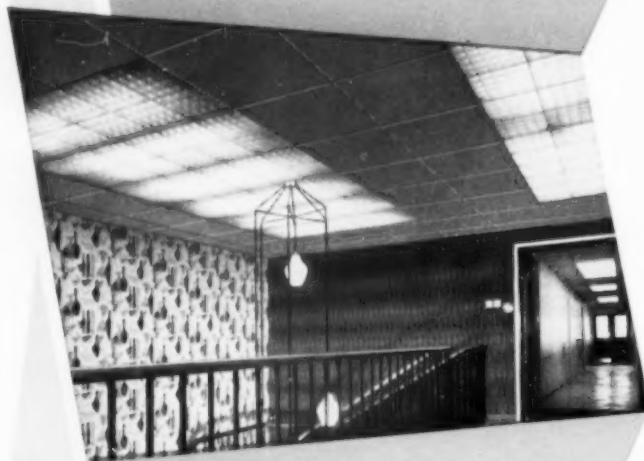
Telephone: Coniston 225

SUSPENDED CEILINGS in MODERN MATERIALS by

DRAFTSELE LIMITED INSULATION DIVISION



Burgess-Sulzer Heated Acoustical Ceiling, constructed from Burgess Acoustic Tiles in the Thorntree Restaurant at the Wilton Works of Imperial Chemical Industries Limited.



Suspended Ceiling in new office block for Messrs. James A. Jobling & Co. Ltd., carried out in Burgess Acoustic Tiles and Handslite Luve-Tiles.



Suspended Ceiling to drawing office for The Workington Iron & Steel Co. Ltd., constructed from Corrugated Translucent Vinyl Sheet with surrounds of Unitex Acoustic Tiles fixed by the MeToO "C" Hook Metal Fixing System.

Draftsele Limited and its Associate Company, Draftsele (London) Limited, are specialist organizations which are equipped to undertake contracts of any size in any part of the United Kingdom for Suspended Ceilings, Thermal and Structural Insulation, Acoustical Correction and Sound Deadening. Needless to say the experience of the two companies covers the most advanced developments in all these fields. As far as Suspended Ceilings are concerned, recently-completed contracts include outstandingly successful examples of the following:—

BURGESS-SULZER HEATED ACOUSTICAL CEILINGS

These are a modern development in economical space heating and acoustical control. Coils of pipe, suspended between a thermal acoustic pad and the acoustic ceiling tiles (which are available in a wide range of colours) are heated by the circulation of water at mean temperatures between 170° and 185° F. In their turn, the coils heat the ceiling tiles by radiation and convection and the tiles themselves become radiating bodies emitting heat. Incidentally the latest Burgess Electrically-heated Ceilings have been installed in the offices of Draftsele (London) Ltd., at 47 The Parade, Leamington Spa, where they can be inspected by appointment.

FULLY-ILLUMINATED CEILINGS

These can be constructed in either Corrugated Translucent Vinyl Sheet (Lumenated Ceilings) or Handslite "Luve Tiles." With either of these materials, the whole, or parts of the ceiling provide the source of light thus offering endless possibilities in regard to the combination of ultra-modern appearance with practical lighting efficiency. Preliminary consultations on the installation of these and other modern ceilings can be arranged entirely without obligation, on application to:—

DRAFTSELE LIMITED

(Insulation Division) 44 DEAN STREET
NEWCASTLE upon TYNE 1. Telephone: 23696/7

Contractors to: **THE ADMIRALTY, THE WAR OFFICE, THE AIR MINISTRY, THE UNITED KINGDOM ATOMIC ENERGY AUTHORITY, PRINCIPAL GOVERNMENT DEPARTMENTS, COUNTY AND MUNICIPAL AUTHORITIES AND LEADING INDUSTRIAL CONCERNS**

ASSOCIATE COMPANY: **DRAFTSELE (LONDON) LTD.**, 47 The Parade, Leamington Spa, Warwickshire. Phone: 1771

BOOKS

FAITH AND STONE

ARCHITECTURE OF TRUTH: THE CISTERCIAN ABBEY OF LE THORONNET IN PROVENCE. Photographed by Lucien Hervé and arranged with quotations and notes by François Cali. With a text by Rayner Heppenstall and a preface by Le Corbusier. Thames and Hudson, 50s.

This measures 8½ inches by 11 inches, is 164 pages long and is mainly composed of 104 large photogravure plates which are accompanied by quotations in large type of a reverent but irrelevant nature. Le Corbusier's 200 words provide such gems as 'Architecture is the unending sum of positive gestures' and a *non-sequitur*: 'Stone is thus man's best friend.' He informs us that the pictures in the book are 'witnesses to the truth,' by which he must mean that if you place one stone firmly upon another it will stay there by force of gravity.

The book concludes with a large, clear plan of the building, 'Book Seven of the Disposition of Buildings' from the Usages and Customs of the Reformed Cistercians of Our Lady of Trappe, and finally a table of plates and quotations.

Presumably, the work is intended to be a form of religious propaganda and it is possible that a reader filled with theistic ardour might be thrilled by it. Another who is a stern agnostic finds it unco-ordinated, pretentious and in disharmony with the simple, unified, strong and unaffected Romanesque structure which is its subject.

Yet the book is superbly printed and produced, and the photographs, though they grow a trifle tedious in their repeated close views of textured stone, are very fine. The emotive experiment has not really come off. A straightforward survey of the building in plain words and photographs would have been more moving. The building can speak for itself.

Eric de Mazé

OXFORD GOTHIC

ENGLISH ART 1216-1307. By Peter Brieger. Oxford University Press. 50s.

The boundaries between the volumes of the Oxford History of English Art have been unfortunate before now. They are exceedingly awkward for Professor Brieger who is forced to start his treatment of the Gothic style in England in 1216, a year which means nothing in the development of architecture or sculpture. From the architectural point of view his date ought to have been c. 1170-80 to include Canterbury, Wells and Lincoln as well as Hexham and Tynemouth from their beginning and also the polygonal and circular keeps which started about 1165 and the new system

of fortification by curtain wall which starts about 1190 at the latest. The same embarrassment troubles Professor Brieger in his treatment of illuminated manuscripts. He says: 'the basic changes had been made in the later twelfth century.' However, he accommodates himself admirably to his difficult assignment and succeeds in contributing some interesting, original and (fortunately) controversial ideas, such as the naming of his three phases 1225-45, 1245-70 and 1270-1310 as Episcopal, Regal and Seigneurial. That in doing so he lets his Early Decorated style start in 1270 is puzzling; 1290 would seem a better initial date. His own warmest sympathies are in the first rather than the second half of the century. He says of the statues on the front at Wells that 'their faces shine with physical beauty, keen intelligence and human benevolence not to be found again until the High Renaissance,' a judgment which not everybody will subscribe to. The first two characteristics might be acceptable if he spoke of Reims, the third hardly even there. It seems on the contrary as if a lack of the desire for physical beauty is one of the most interesting features of the front at Wells, both in its sculptural and architectural aspects. No students can overlook the extraordinary incongruities of composition which the designers of Early English fronts such as those of Wells and Salisbury have not only committed but in all probability enjoyed. Professor Brieger's volume is excellently balanced and just what the architectural student needed.

S.T.M.

WHAT MANCHESTER BUILT YESTERDAY

THE STONES OF MANCHESTER. By Cecil Stewart. London, Edward Arnold, 1966. 40s. THE ARCHITECTURE OF MANCHESTER, AN INDEX OF THE PRINCIPAL BUILDINGS AND THEIR ARCHITECTS 1800-1900. By Cecil Stewart. Manchester, Libraries Committee, 1956. 45s.

No English provincial city, except perhaps Liverpool, is so deserving of attention for its nineteenth-century architecture as Manchester. Its buildings are at once notably local in character and yet broadly representative of their periods; varied over three or more generations, yet with a core of characteristic achievement, centring in the commercial work of Edward Walters, that is peculiarly Mancunian. From the Grecian Portico Library, built by Thomas Harrison of Chester in 1802, to the Long Street Methodist Church and School, Middleton, built by Edgar Wood in 1899 in a sort of Art Nouveau Gothic, greater Manchester offers in almost every decade monuments of real distinction in the successive and concurrent modes of their day. While Manchester, from Francis Goodwin to Wood, produced a series of local profes-

sionals of quality comparable to Walters, architects of national reputation were also repeatedly called in, from Harrison at one end of the century to Champneys at the other. Barry's career began here and, if his early churches are of little interest, his Royal Manchester Institution of 1824 illustrates as handsomely the Grecian mode that he was leaving behind as his Athenaeum of 1836 does the palazzo mode that he initiated.

Pugin, at the beginning of the Early Victorian phase of the Gothic Revival, provided in 1842 at St. Wilfrid's, Hulme, with its (never completed) corner tower, one of the basic paradigms of nineteenth-century church architecture; thirty years later Bodley at St. Augustine's, Pendlebury, built in 1870-74, his first mature church, offered perhaps the most distinguished model for the Late Victorian phase. In 1859 the winning of the competition for the Assize Courts by the local architect Alfred Waterhouse marked the beginning of the acceptance of High Victorian Gothic for public buildings throughout the Anglo-Saxon world; his Town Hall, designed in 1868, was almost the last major monument in that mode.

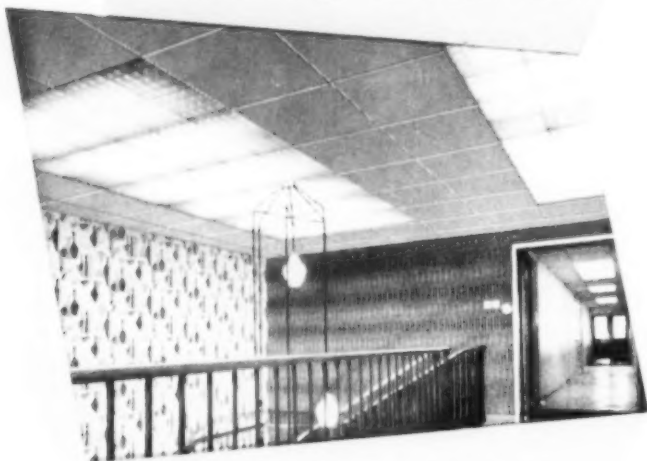
In *The Stones of Manchester* (which, like those of Venice, are very likely to be bricks) Cecil Stewart recounts the story of nineteenth-century architecture as it is illustrated in the buildings of that city; in *The Architecture of Manchester* he provides a wealth of information about almost all of its nineteenth-century buildings concerning which any visitor or student might be curious. To this he appends an index of the principal architects with lists of their local work that is especially valuable for men like Richard Lane, J. E. Gogan, Edward Walters, Thomas Worthington, and Edgar Wood, whose practice centred there. He says almost nothing, however, about technical developments. The important Phillips & Lee mill at Salford of 1801, probably by Boulton & Watts, the second to have a complete internal skeleton of iron, is not mentioned, nor are the advances in iron construction associated with Sir William Fairbairn; the prefabrications of E. T. Bellhouse receive but a paragraph. Leaving this aside, the story is well filled out from the Grecian of Harrison and Goodwin, through the Early Victorian Gothic of Pugin, Scott, and Sharpe, to the *palazzos* of Walters and Gregan. But is it neither so clear nor so well-told beyond that. Since Butterfield's local church, St. Cross's, Ashton Road, is relatively late (1863) and his epoch-making 'All Saints', Margaret Street, in London, is here casually dated 1850—the year of its consecration, admittedly—when it should be dated 1849 or '50 to 1852 or '53, the work of the younger and less revolutionary Waterhouse acquires all too much significance. Curiously enough, his Fryer & Binyon Warehouse of 1855-56 in Chester Street, Chorlton-on-Medlock, is listed, but its significantly

SUSPENDED CEILINGS in MODERN MATERIALS by

DRAFTSELE LIMITED INSULATION DIVISION



Burgess-Sulzer Heated Acoustical Ceiling, constructed from Burgess Acoustic Tiles in the Thorntree Restaurant at the Wilton Works of Imperial Chemical Industries Limited.



Suspended Ceiling in new office block for Messrs. James A. Jobling & Co. Ltd., carried out in Burgess Acoustic Tiles and Handslite Luvex-Tiles.



Suspended Ceiling to drawing office for The Workington Iron & Steel Co. Ltd., constructed from Corrugated Translucent Vinyl Sheeting with surrounds of Unitex Acoustic Tiles fixed by the MeTeO "C" Hook Metal Fixing System.

Draftsele Limited and its Associate Company, Draftsele (London) Limited, are specialist organizations which are equipped to undertake contracts of any size in any part of the United Kingdom for Suspended Ceilings, Thermal and Structural Insulation, Acoustical Correction and Sound Deadening. Needless to say the experience of the two companies covers the most advanced developments in all these fields. As far as Suspended Ceilings are concerned, recently-completed contracts include outstandingly successful examples of the following:

BURGESS-SULZER HEATED ACOUSTICAL CEILINGS

These are a modern development in economical space heating and acoustical control. Coils of pipe, suspended between a thermal acoustic pad and the acoustic ceiling tiles (which are available in a wide range of colours) are heated by the circulation of water at mean temperatures between 170° and 185° F. In their turn, the coils heat the ceiling tiles by radiation and convection and the tiles themselves become radiating bodies emitting heat. Incidentally the latest Burgess Electrically-Heated Ceilings have been installed in the offices of Draftsele (London) Ltd., at 47 The Parade, Leamington Spa, where they can be inspected by appointment.

FULLY-ILLUMINATED CEILINGS

These can be constructed in either Corrugated Translucent Vinyl Sheeting (Illuminated Ceilings) or Handslite "Luvex-Tiles." With either of these materials, the whole, or parts of the ceiling provide the source of light thus offering endless possibilities in regard to the combination of ultra-modern appearance with practical lighting efficiency. Preliminary consultations on the installation of these and other modern ceilings can be arranged entirely without obligation, on application to:

DRAFTSELE LIMITED

(Insulation Division) 44 DEAN STREET
NEWCASTLE upon TYNE 1. Telephone: 23696/7

Contractors to: THE ADMIRALTY,
THE WAR OFFICE, THE AIR MINISTRY, THE
UNITED KINGDOM ATOMIC ENERGY AUTHORITY,
PRINCIPAL GOVERNMENT DEPARTMENTS,
COUNTY AND MUNICIPAL AUTHORITIES
AND LEADING INDUSTRIAL CONCERNS

ASSOCIATE COMPANY: DRAFTSELE (LONDON) LTD., 47 The Parade, Leamington Spa, Warwickshire. Phone: 1771

BOOKS

FAITH AND STONE

ARCHITECTURE OF TRUTH: THE CISTERCIAN ABBEY OF LE THORONNET IN PROVENCE. Photographed by Lucien Hervé and arranged with quotations and notes by François Calé. With a text by Rayner Heppenstall and a preface by Le Corbusier. Thames and Hudson, 50s.

This measures 8½ inches by 11 inches, is 164 pages long and is mainly composed of 104 large photogravure plates which are accompanied by quotations in large type of a reverent but irrelevant nature. Le Corbusier's 200 words provide such gems as 'Architecture is the unending sum of positive gestures' and a *non-sequitur*: 'Stone is thus man's best friend.' He informs us that the pictures in the book are 'witnesses to the truth,' by which he must mean that if you place one stone firmly upon another it will stay there by force of gravity.

The book concludes with a large, clear plan of the building, 'Book Seven of the Disposition of Buildings' from the Usages and Customs of the Reformed Cistercians of Our Lady of Trappe, and finally a table of plates and quotations.

Presumably, the work is intended to be a form of religious propaganda and it is possible that a reader filled with theistic ardour might be thrilled by it. Another who is a stern agnostic finds it unco-ordinated, pretentious and in disharmony with the simple, unified, strong and unaffected Romanesque structure which is its subject.

Yet the book is superbly printed and produced, and the photographs, though they grow a trifle tedious in their repeated close views of textured stone, are very fine. The emotive experiment has not really come off. A straightforward survey of the building in plain words and photographs would have been more moving. The building can speak for itself.

Eric de Maré

OXFORD GOTHIC

ENGLISH ART 1216-1307. By Peter Brieger. Oxford University Press, 50s.

The boundaries between the volumes of the Oxford History of English Art have been unfortunate before now. They are exceedingly awkward for Professor Brieger who is forced to start his treatment of the Gothic style in England in 1216, a year which means nothing in the development of architecture or sculpture. From the architectural point of view his date ought to have been c. 1170-80 to include Canterbury, Wells and Lincoln as well as Hexham and Tynemouth from their beginning and also the polygonal and circular keeps which started about 1165 and the new system

of fortification by curtain wall which starts about 1190 at the latest. The same embarrassment troubles Professor Brieger in his treatment of illuminated manuscripts. He says: 'the basic changes had been made in the later twelfth century.' However, he accommodates himself admirably to his difficult assignment and succeeds in contributing some interesting, original and (fortunately) controversial ideas, such as the naming of his three phases 1225-45, 1245-70 and 1270-1310 as Episcopal, Regal and Seigneurial. That in doing so he lets his Early Decorated style start in 1270 is puzzling; 1290 would seem a better initial date. His own warmest sympathies are in the first rather than the second half of the century. He says of the statues on the front at Wells that 'their faces shine with physical beauty, keen intelligence and human benevolence not to be found again until the High Renaissance,' a judgment which not everybody will subscribe to. The first two characteristics might be acceptable if he spoke of Reims, the third hardly even there. It seems on the contrary as if a lack of the desire for physical beauty is one of the most interesting features of the front at Wells, both in its sculptural and architectural aspects. No students can overlook the extraordinary incongruities of composition which the designers of Early English fronts such as those of Wells and Salisbury have not only committed but in all probability enjoyed. Professor Brieger's volume is excellently balanced and just what the architectural student needed.

S.T.S.

WHAT MANCHESTER BUILT YESTERDAY

THE STONES OF MANCHESTER. By Cecil Stewart. London, Edward Arnold, 1956. 40s. THE ARCHITECTURE OF MANCHESTER, AN INDEX OF THE PRINCIPAL BUILDINGS AND THEIR ARCHITECTS 1800-1900. By Cecil Stewart. Manchester, Libraries Committee, 1956. 45s.

No English provincial city, except perhaps Liverpool, is so deserving of attention for its nineteenth-century architecture as Manchester. Its buildings are at once notably local in character and yet broadly representative of their periods; varied over three or more generations, yet with a core of characteristic achievement, centring in the commercial work of Edward Walters, that is peculiarly Mancunian. From the Grecian Portico Library, built by Thomas Harrison of Chester in 1802, to the Long Street Methodist Church and School, Middleton, built by Edgar Wood in 1899 in a sort of Art Nouveau Gothic, greater Manchester offers in almost every decade monuments of real distinction in the successive and concurrent modes of their day. While Manchester, from Francis Goodwin to Wood, produced a series of local profes-

sionals of quality comparable to Walters, architects of national reputation were also repeatedly called in, from Harrison at one end of the century to Champneys at the other. Barry's career began here and, if his early churches are of little interest, his Royal Manchester Institution of 1824 illustrates as handsomely the Grecian mode that he was leaving behind as his Athenaeum of 1836 does the palazzo mode that he initiated.

Pugin, at the beginning of the Early Victorian phase of the Gothic Revival, provided in 1842 at St. Wilfrid's, Hulme, with its (never completed) corner tower, one of the basic paradigms of nineteenth-century church architecture; thirty years later Bodley at St. Augustine's, Pendlebury, built in 1870-74, his first mature church, offered perhaps the most distinguished model for the Late Victorian phase. In 1859 the winning of the competition for the Assize Courts by the local architect Alfred Waterhouse marked the beginning of the acceptance of High Victorian Gothic for public buildings throughout the Anglo-Saxon world; his Town Hall, designed in 1868, was almost the last major monument in that mode.

In *The Stones of Manchester* (which, like those of Venice, are very likely to be bricks) Cecil Stewart recounts the story of nineteenth-century architecture as it is illustrated in the buildings of that city; in *The Architecture of Manchester* he provides a wealth of information about almost all of its nineteenth-century buildings concerning which any visitor or student might be curious. To this he appends an index of the principal architects with lists of their local work that is especially valuable for men like Richard Lane, J. E. Gogan, Edward Walters, Thomas Worthington, and Edgar Wood, whose practice centred there. He says almost nothing, however, about technical developments. The important Phillips & Lee mill at Salford of 1801, probably by Boulton & Watts, the second to have a complete internal skeleton of iron, is not mentioned, nor are the advances in iron construction associated with Sir William Fairbairn; the prefabrications of E. T. Bellhouse receive but a paragraph. Leaving this aside, the story is well filled out from the Grecian of Harrison and Goodwin, through the Early Victorian Gothic of Pugin, Scott, and Sharpe, to the *palazzos* of Walters and Gregan. But it is neither so clear nor so well-told beyond that. Since Butterfield's local church, St. Cross's, Ashton Road, is relatively late (1863) and his epoch-making All Saints', Margaret Street, in London, is here casually dated 1859—the year of its consecration, admittedly—when it should be dated 1849 or '50 to 1852 or '53, the work of the younger and less revolutionary Waterhouse acquires all too much significance. Curiously enough, his Fryer & Binyon Warehouse of 1855-56 in Chester Street, Chorlton-on-Medlock, is listed, but its significantly

round-arched Ruskinism is not noted in the text; nor are the very early arcaded fronts by Starkey & Cuffley in Market Street of 1851 mentioned at all. Despite the historical rather than intrinsic importance of Waterhouse's Assize Courts, the character of their Ruskinism is misinterpreted. Unlike Worthington's Memorial Hall of 1865, the Assize Courts include no features that are, properly speaking, Venetian; but the design does owe something to various things by Deane & Woodward that Ruskin sponsored and perhaps collaborated on—notably the University Museum at Oxford, just completed in 1859, and the project of 1857 for the Government Offices.

The priority of Worthington's Manchester Albert Memorial, the design for which was published early enough to provide a model for Scott's winning project for the national memorial in London, is properly stressed; and so is the special boldness of E. W. Pugin's St. Francis, Gorton, of 1863, with its Butterfieldian frontal buttresses, and of Joseph A. Hansom's Holy Name, Oxford Road, of 1869. But the lateness of Street's Manchester church, St. Peter's, Swinton, of 1868, and the general lack of advanced church work of the fifties leaves the story of the High Victorian period confused on the Gothic side.

The non-Gothic, generically Queen Anne, style of Bodley's parsonage in Pendlebury is noted; but the historical importance of this modest house, earlier in date than Eden Nesfield's Kimmel Park (1870-73), J. J. Stevenson's Red House (1871) and Shaw's New Zealand Chambers (1872-73), is not indicated. It is true enough, however, as Mr. Stewart emphasizes, that the quality and significance of Manchester architecture went down hill rapidly after that date. Bodley did no more building here, and there is nothing at all by Nesfield, by Shaw, or by Webb. E. R. Robson's Grange Street School in the Bradford district is relatively late (1878) and untypical; the work of his local imitators who built the local board schools is distinctly inferior to their London models.

Happily the story takes an upward turn at the end with the beginning of the career of Edgar Wood and his later partner J. H. Sellars. Yet it cannot be said that their work gives character to any considerable areas of the city in the way that of Walters and his contemporaries did to the principal business streets in the years between 1840 and 1870.

It is not surprising in so compendious a study that there should be a few errors and omissions; notably of certain dates in the text of the *Stones*—they are, however, usually supplied in the *Architecture*. Only a Mancunian could check the vast amount of detailed information given in the *Architecture*; but an outsider may note that the Olivo & Spartali Warehouse by Clegg & Knowles illustrated on page 103 is in Cross Street and not the one at the corner of Portland and Princess Streets.

It is the illustrations which are the real disappointment in the *Stones*. Not only are some of the finest things, such as Walters' Edmund Potter Warehouse at 10 Charlotte Street and the Exchange Station, omitted, but there is only one photograph—of a rather inconsequential detail of the 'seventies

—provided. Contemporary lithographs and wood engravings have their important place in illustrating nineteenth-century architecture—it is necessary to use them to show projects and they often reveal the architect's intentions better than photographs. But photographs are necessary also. Admittedly Manchester has long been one of the world's least photographable cities. The solid black buildings under what was, until the air was cleaned lately, usually a dark grey sky—the finest often facing north—seemed absolutely to defy the camera. But excellent photographs have been taken for the NBR—since this book appeared—of such an outlying monument as Bodley's St. Augustine's, Pendlebury; and even for buildings in the heart of the city some photographic details of stonework and brickwork would have revealed that extremely high level of Victorian workmanship in Manchester by which contemporaries were always struck in the 'forties and 'fifties.

Henry-Russell Hitchcock

MOTOPIA

MIXED BLESSING, *The Motor in Britain*. By C. D. Buchanan. Leonard Hill. 30s.

The cult of the motor car is usually invested with such glamour that it is refreshing to read a self-confessed addict who is eloquent on the pros of motoring yet leaves the reader in no doubt about the cons. Ribbon development, urban sprawl, the 'grinding of amenities,' to say nothing of death, injury, and the battering of the senses, are direct products of a habit which has created more problems than we seem able to solve. Even Subtopia, which we had hitherto assumed to be a fashionable new ailment, is such a motor-induced malady that the author considers it could more accurately be renamed Motopia.

Although the increasing popularity of the motor vehicle is already threatening to destroy its very utility, much else too is threatened. Civilized urban life is at stake and the old and familiar pattern of streets and buildings which has served for so long is likely to be swept away to make room for a new environment if ever we find enough money to create one. What this environment will look like is anybody's guess. An admiring side-glance at the American scene leaves us apprehensive that reality may yet again catch up with art to provide a kind of super action-painting in swirling concrete and hurtling steel. The idea of motorless zones sounds more attractive. But since we have been 'taken for a ride to the point of no return' town planners, who have often been criticized for paying too much attention to road pattern at the expense of other things, must now meet the challenge of providing civilized towns which also cater for peaceful penetration by the motor vehicle. Techniques have improved, yet even the new development plans hold out little hope of adequate solutions in this direction. Meanwhile, costly piecemeal widenings and bigger roundabouts continue to tear the heart from our towns without doing more than attract faster traffic and create pedestrian-vehicular conflicts on a larger scale.

This book does admirably what it sets out to do: trace the development of the motor vehicle, show its dominant position in social and economic life, discuss problems that have arisen but dispel the idea that there are easy solutions.

The subject, so ably put in perspective here, is one to which the Civic Trust might appropriately address itself, with financial encouragement—one would hope—from the motor industry and technical advice from Mr. Buchanan.

Raymond Spurrier

Shorter Notices

ALBERTI AND THE TEMPIO MALATESTI-ANO. Pierpont Morgan Library, New York. Medieval and Renaissance Monograph Series No. 1, 1957. \$1.00.

In 1956 the Pierpont Morgan Library acquired a letter written by Leon Battista Alberti to Matteo de Pasti in 1454 and dealing with S. Francesco in Rimini, the church whose front and side he designed. The letter is printed in a pamphlet recently published by the Library, and commented on by Cecil Grayson. The most interesting point is Alberti's little sketch of how the sloping fronts of the aisle roofs were to be faced. The idea was a pair of affronted S-curves on each side rising slightly towards the centre. No-one can say that Mr. Grayson has solved all the riddles which the letter has posed ever since it was first published inadequately in 1779. But it is good all the same to have his views and even better to have a facsimile reproduction of the letter written in Alberti's beautiful hand.

N.P.

THE NEW SCHOOL. By Alfred Roth. Girsberger, Zurich. Fr. 36.

Alfred Roth, the distinguished Swiss architect, has brought out a second edition of his book *The New School* first published in 1950. It contains the same sections dealing with the school in its environment, the different types of school and a technical appendix, and the same Epilogue based on the work of Herbert Read, all reprinted from the first edition. But the schools illustrated, sandwiched in between, are nearly all different. Only four of the original twenty-one are retained in the present array of thirty-one schools chosen from Europe, America and Japan.

After an interval of seven years of intensive work one might expect to see some progress in the design of schools and some tentative conclusions from the teaching profession or the school authorities. The New School is no longer quite so new. The earliest illustrated is Duiker's Open-Air School in Amsterdam designed in 1930. There has been time enough to find out how much importance should really be attached to such things as sound insulation between classrooms, daylight factors, methods of solving the problems of cross-ventilation, under-cover circulation and so on, and how much to the intangible qualities of scale, atmosphere, sense of order and all the other factors that go to make what the Americans call an efficient school plant. But on these questions Roth is silent. He gives the reader a lot of information but leaves him to go and find out how much it is all worth.

William Tatton Brown

light...bright...and
washable
thanks to
Gard

Gard - formerly known as Mander's Emulsion Varnish - is essential where easily marked expensive wallpapers or water-paints are specified. *Gard* gives additional protection to flat oil and emulsion paint and is applied by brush, roller or spray. *Gard* dries in two hours and forms a protective skin from which dirt, grease and stains can be quickly and easily removed. *Gard* is colourless and, when dry, gives a sheen varying from matt eggshell to semi-gloss, depending upon the porosity and colour of the surface.

Write for leaflet giving full particulars.



MANDER'S
COLOURLESS **Gard**

makes wallpaper WASHABLE!

MANDER BROTHERS LTD • Dept. P8 • WOLVERHAMPTON • Tel. WOLVERHAMPTON 20601

round-arched Ruskinism is not noted in the text; nor are the very early arcaded fronts by Starkey & Cuffley in Market Street of 1851 mentioned at all. Despite the historical rather than intrinsic importance of Waterhouse's Assize Courts, the character of their Ruskinism is misinterpreted. Unlike Worthington's Memorial Hall of 1865, the Assize Courts include no features that are, properly speaking, Venetian; but the design does owe something to various things by Deane & Woodward that Ruskin sponsored and perhaps collaborated on—notably the University Museum at Oxford, just completed in 1850, and the project of 1857 for the Government Offices.

The priority of Worthington's Manchester Albert Memorial, the design for which was published early enough to provide a model for Scott's winning project for the national memorial in London, is properly stressed; and so is the special boldness of E. W. Pugin's St. Francis, Gorton, of 1863, with its Butterfieldian frontal buttresses, and of Joseph A. Hansom's Holy Name, Oxford Road, of 1869. But the lateness of Street's Manchester church, St. Peter's, Swinton, of 1868, and the general lack of advanced church work of the fifties leaves the story of the High Victorian period confused on the Gothic side.

The non-Gothic, generically Queen Anne, style of Bodley's parsonage in Pendlebury is noted; but the historical importance of this modest house, earlier in date than Eden Nesfield's Kinnel Park (1870-73), J. J. Stevenson's Red House (1871) and Shaw's New Zealand Chambers (1872-73), is not indicated. It is true enough, however, as Mr. Stewart emphasizes, that the quality and significance of Manchester architecture went down hill rapidly after that date. Bodley did no more building here, and there is nothing at all by Nesfield, by Shaw, or by Webb. E. R. Robson's Grange Street School in the Bradford district is relatively late (1878) and untypical; the work of his local imitators who built the local board schools is distinctly inferior to their London models.

Happily the story takes an upward turn at the end with the beginning of the career of Edgar Wood and his later partner J. H. Sellars. Yet it cannot be said that their work gives character to any considerable areas of the city in the way that of Walters and his contemporaries did to the principal business streets in the years between 1840 and 1870.

It is not surprising in so compendious a study that there should be a few errors and omissions; notably of certain dates in the text of the *Stones*—they are, however, usually supplied in the *Architecture*. Only a Mancunian could check the vast amount of detailed information given in the *Architecture*; but an outsider may note that the Olivo & Spartali Warehouse by Clegg & Knowles illustrated on page 103 is in Cross Street and not the one at the corner of Portland and Princess Streets.

It is the illustrations which are the real disappointment in the *Stones*. Not only are some of the finest things, such as Walters' Edmund Potter Warehouse at 10 Charlotte Street and the Exchange Station, omitted, but there is only one photograph—of a rather inconsequential detail of the 'seventies

—provided. Contemporary lithographs and wood engravings have their important place in illustrating nineteenth-century architecture—it is necessary to use them to show projects and they often reveal the architect's intentions better than photographs. But photographs are necessary also. Admittedly Manchester has long been one of the world's least photographable cities. The solid black buildings under what was, until the air was cleaned lately, usually a dark grey sky—the finest often facing north—seemed absolutely to defy the camera. But excellent photographs have been taken for the NBR—since this book appeared—of such an outlying monument as Bodley's St. Augustine's, Pendlebury; and even for buildings in the heart of the city some photographic details of stonework and brickwork would have revealed that extremely high level of Victorian workmanship in Manchester by which contemporaries were always struck in the 'forties and 'fifties.

Henry-Russell Hitchcock

MOTOPIA

MIXED BLESSING, *The Motor in Britain*. By C. D. Buchanan. Leonard Hill. 30s.

The cult of the motor car is usually invested with such glamour that it is refreshing to read a self-confessed addict who is eloquent on the pros of motoring yet leaves the reader in no doubt about the cons. Ribbon development, urban sprawl, the 'grinding of amenities,' to say nothing of death, injury, and the battering of the senses, are direct products of a habit which has created more problems than we seem able to solve. Even Subtopia, which we had hitherto assumed to be a fashionable new ailment, is such a motor-induced malady that the author considers it could more accurately be renamed Motopia.

Although the increasing popularity of the motor vehicle is already threatening to destroy its very utility, much else too is threatened. Civilized urban life is at stake and the old and familiar pattern of streets and buildings which has served for so long is likely to be swept away to make room for a new environment if ever we find enough money to create one. What this environment will look like is anybody's guess. An admiring side-glance at the American scene leaves us apprehensive that reality may yet again catch up with art to provide a kind of super action-painting in swirling concrete and hurtling steel. The idea of motorless zones sounds more attractive. But since we have been 'taken for a ride to the point of no return' town planners, who have often been criticized for paying too much attention to road pattern at the expense of other things, must now meet the challenge of providing civilized towns which also cater for peaceful penetration by the motor vehicle. Techniques have improved, yet even the new development plans hold out little hope of adequate solutions in this direction. Meanwhile, costly piecemeal widenings and bigger roundabouts continue to tear the heart from our towns without doing more than attract faster traffic and create pedestrian-vehicular conflicts on a larger scale.

This book does admirably what it sets out to do: trace the development of the motor vehicle, show its dominant position in social and economic life, discuss problems that have arisen but dispel the idea that there are easy solutions.

The subject, so ably put in perspective here, is one to which the Civic Trust might appropriately address itself, with financial encouragement—one would hope—from the motor industry and technical advice from Mr. Buchanan.

Raymond Spurrier

Shorter Notices

ALBERTI AND THE TEMPIO MALATESTI-ANO. Pierpont Morgan Library, New York. Medieval and Renaissance Monograph Series No. 1, 1957. \$1.00.

In 1956 the Pierpont Morgan Library acquired a letter written by Leon Battista Alberti to Matteo de Pasti in 1454 and dealing with S. Francesco in Rimini, the church whose front and side he designed. The letter is printed in a pamphlet recently published by the Library, and commented on by Cecil Grayson. The most interesting point is Alberti's little sketch of how the sloping fronts of the aisle roofs were to be faced. The idea was a pair of affronted S-curves on each side rising slightly towards the centre. No-one can say that Mr. Grayson has solved all the riddles which the letter has posed ever since it was first published inadequately in 1779. But it is good all the same to have his views and even better to have a facsimile reproduction of the letter written in Alberti's beautiful hand.

N.P.

THE NEW SCHOOL. By Alfred Roth. Girsberger, Zurich. Fr. 36.

Alfred Roth, the distinguished Swiss architect, has brought out a second edition of his book *The New School* first published in 1950. It contains the same sections dealing with the school in its environment, the different types of school and a technical appendix, and the same Epilogue based on the work of Herbert Read, all reprinted from the first edition. But the schools illustrated, sandwiched in between, are nearly all different. Only four of the original twenty-one are retained in the present array of thirty-one schools chosen from Europe, America and Japan.

After an interval of seven years of intensive work one might expect to see some progress in the design of schools and some tentative conclusions from the teaching profession or the school authorities. The *New School* is no longer quite so new. The earliest illustrated is Duiker's Open-Air School in Amsterdam designed in 1930. There has been time enough to find out how much importance should really be attached to such things as sound insulation between classrooms, daylight factors, methods of solving the problems of cross-ventilation, under-cover circulation and so on, and how much to the intangible qualities of scale, atmosphere, sense of order and all the other factors that go to make what the Americans call an efficient school plant. But on these questions Roth is silent. He gives the reader a lot of information but leaves him to go and find out how much it is all worth.

William Tatten Brown

light...bright...and
washable
thanks to
Gard

Gard—formerly known as Mander's Emulsion Varnish—is essential where easily marked expensive wallpapers or water-paints are specified. *Gard* gives additional protection to flat oil and emulsion paint and is applied by brush, roller or spray. *Gard* dries in two hours and forms a protective skin from which dirt, grease and stains can be quickly and easily removed. *Gard* is colourless and, when dry, gives a sheen varying from matt eggshell to semi-gloss, depending upon the porosity and colour of the surface.

Write for leaflet giving full particulars.



MANDER'S
COLOURLESS **Gard**

makes wallpaper WASHABLE!

MANDER BROTHERS LTD • Dept. P8 • WOLVERHAMPTON • Tel. WOLVERHAMPTON 20601



Sir Christopher

**would have
been keen on**

KEE KLAMPS

Registered Trade Mark

The inventive mind of the great architect of St. Pauls produced an individual solution to the problem of supporting the great Dome on a weight-carrying brick cone. So today, Kee Klamps, the product of inventive minds at Reading, extend the possibilities of construction in an entirely original and up-to-date way. Yes, Wren would have found a use for Kee Klamps.

Kee Klamp Engineers, qualified to advise, are freely available to discuss applications of this system.

**GEO. H. GASCOIGNE CO. LTD.,
579 GASCOIGNE HOUSE, READING, BERKS**
Telephone READING 54417 (3 lines)



EXHIBITIONS

PAINTING AND SCULPTURE

A correspondent has been very sharp with me. A month or two ago, I said that 'the artist who has an itch to communicate is only a pseudo-artist,' and he, the correspondent, says that it's the most nonsensical statement he's come across for years. It looks a bit peculiar, even to me; in fact, it reminds me of one of those phrases that came into my head with great frequency when I was much younger and, to lift a phrase of another kind from Jack Kerouac, 'was all hung up on the wonderful possibilities of becoming a real intellectual.' This apologetic tone of voice doesn't mean that I'm taking back what I said. Artists put things down for reasons that are obscure even to themselves. Alan Davie says in the catalogue of his White-chapel retrospective: 'When I am working I am aware of a striving, a yearning, the making of many impossible attempts at a kind of transmutation—a searching for a formula for the magical conjuring of the unknowable.' I quote him with deep respect, but he is admittedly an extreme case, and the point I still have to make is that even when a work looks as if it is being communicative it invariably turns out to be an enigma: so I shall have to make a guinea pig of something that looks straightforward, and try to show how it begins to twist and turn and contradict itself if it is stared at a little harder than usual.

I have been staring at some nudes by William Coldstream which David Sylvester included in the fourth of those annual exhibitions of contemporary British painting at Arthur Tooth & Sons that effectively caricature the ideas of the critic who chooses them. There were four paintings of the nude by Coldstream, but this is the only one that contains two figures, 1. They are refined and sensitive studies from the model, but the fact that they are well on the way to becoming realistic portraits of naked girls may have frightened the painter, for, apart from a small pre-war canvas painted in another manner, he has *unfinished* them in a very deliberate way. Clusters of short red lines have been painted across the navel, the nipples, between the breasts and at the base of the throat, and in the actual paintings they operate as small, brilliant accents of pure colour against the light tones of the flesh. We are, of course, intended to recognize the red lines as proportion marks and as signs of 'work in progress.' They belong in fact to a curious modern *genre* which can be

described as completed works in progress. Giacometti is better at it than anyone else, and it arises from the example of Cézanne who, in his late watercolours, stopped short of representing the object at the point where a purely visual knowledge of it yielded him his abstract pictorial values. But Coldstream has already gone beyond this point. He has created the illusion of flesh; his images have entered what Venturi calls 'the sphere of contingency.' We are as conscious of the



humanity of the models as we are of Coldstream's lines and colours. So the red lines are not only measurements, they are marks on flesh. Where am I supposed to go from here? Alan Davie says that 'the critic must concern himself with the image that envelops him, without mistaking the marks on the canvas for that image,' but quite apart from the fact that a great many images just haven't got the energy to get up off the canvas and envelop us, if I work myself into being enveloped by the Coldstream images I discover that the red lines become neat little cuts in the flesh made by a sharp instrument—a razor blade, I should think—and this brings to mind Grünewald, who pricked and scratched the body of his crucified Christ to suggest that he had been whipped with the thorns before they were turned into a crown; but art historians tend to think that this was only an alibi. This is as far as I can go; everything else is surmise and home-made psycho-analysis, so I am moving on to the exhibition called 'The Religious Theme,' organized by the Contemporary Art Society, probably to find out something about the spiritual condition of artists living in the Welfare State, and as you can imagine, it was a hot-bed of anomalies, ambiguities, naïveties and pure get-outs.

But it included two very good paintings. A 'Deposition' by Ceri Richards, with the



broken, Guerniquesque body of Christ wrapped in exquisitely painted white cloths and Keith Vaughan's 'Martyrdom of St. Sebastian,' 2, which demonstrates once again this artist's gift for evoking space through the juxtaposition of areas of flat colour. The figures still look like plasticine, and give the impression that they would have to be pushed and pulled before they could adopt other positions, and I sometimes think that no female figures ever appear in his pictures because all the girls of the tribe are in Cézanne's bathing pictures.

Some works of art come to us already labelled as enigmas. One of them, a small prehistoric sculpture, 3, which looks like a career woman turning into a cat, was included in the exhibition of Art Treasures from Japan. It bears this inscription in the catalogue: 'The face is flat, the eyes slanting; the upper lip is split to the nose. The L-shaped incisions on the right cheek and the dislocation of the shoulders are deliberate and unexplained features.' Nevertheless, I found it more approach-



able than anything else in this remarkable and beautifully mounted exhibition; perhaps because the twentieth-century is more at ease with magic images than with religious ones. Certainly no one who has any feeling for the female object which

Picasso painted on May 13, 1929 (p. 160, 'Fifty Years of the Art of Picasso') or the rather more melodramatic 'Jewish Angel' by Chirico, composed of two openings of a colonnade at night turned into a metal helmet and surmounted by a wig, can have found anything alien about the prehistoric cat-woman.

The inventive little family group reproduced here, 4, was on view in the fascinating Pre-Columbian show at Gimpel Fils. It is from one of the West Coast cultures, in what is now Mexico, whose work in clay was, it seems, characterized by a persistently humorous approach to the human figure. I am not sure that a sense of the absurdity of the human figure necessarily implies a sense of humour, but there is something about the inventiveness of these figures that stops far short of the cult image and suggests that the magic of this people was pleasantly white.



Some handsome new pieces by Henry Moore have been on view in an elegant show at the Hanover Gallery which also included sculpture and drawings by Matisse, Giacometti and Marini. This 'Draped Seated Figure against a Wall,' 5, is related to the drawings of figures in prison-like settings with slotted walls which Moore made before the war. In another example called 'Girl Seated against Square Wall,' the slotted wall behind the figure comes straight out of the drawings, but in the one illustrated, the wall is more thoroughly sculptural, and the figure has, so to speak, come to this setting of her own accord. It creates a fine sense of spaciousness and freedom. Moore, like Picasso, is now able to move about in his past as if it were a world in itself with many regions still only partly explored.

I quoted Alan Davie at the beginning of this note because I expected to comment on his show. But I haven't yet found a presentable way of writing about this master of the enveloping image, and will make another attempt next month.

Robert Melville



TOWNSCAPE

RASHID STREET, BAGDAD

Although it has little beauty and its gradual transformation arouses few regrets, there is a certain nostalgia about the passing away of what was once the chief thoroughfare of Bagdad, east of and parallel with the river.

There were days, before ever I knew it, when the sewers were open and a steam roller was said once to have vanished suddenly from the sight of the passers-by into a hole. When I first saw Rashid Street in 1929, it was a long jostling stream of few cars and many carriages, donkeys and camels, with dust everywhere, and patches of asphalt melting in the sun. Then, in the middle of the war, Arshad al-Umari, the Mayor of Bagdad, opened a parallel artery; and a third is now being added, still farther inland from the Tigris bank: and the street itself, with new buildings soaring above it in the modern honeycomb patterns that do not mis-fit the East—uncompromising shadows and straight

lines—is being gradually eaten by modernity as bit after bit goes down for a rebuilding.

The Mosques remain: there is Haidar-Khaneh's blue-tiled dome with the turquoise niche of its gateway and the little shops that cluster like chicks round a hen; and the older and fine gate of the Mirjaniye, a distress to town-planners since it slants athwart the line of the street at an angle of its own and is far too precious to be moved. Apart from these, the street as it stands is doomed. Nor can one wish, in the wealthy modern revival of the Abbassid prosperity, to encourage the preservation of what is after all essentially mediocre.

And yet, shoddy as it is, I could not help feeling as I sauntered up and down it last summer, that some record should be kept. It is possible, and even likely, that the young Iraqi of tomorrow may look back on these first years of tentative western adaptation as one of the chief turning points in his long story. What would he not give now for a few records, on the other bank of Tigris, of the old round city of Mansur? Like M. Jourdain, who did not know he was talking prose, we are apt to forget that we are living history: and that the commonplace of



WEST DERBY SECONDARY TECHNICAL SCHOOL, LIVERPOOL
Harold E. Davies & Son, Chartered Architects

HOPE'S WINDOW WALL

*in hot-dip galvanized steel
with aluminium-clad columns*

HENRY HOPE & SONS LTD

Smethwick, Birmingham & 17 Berners Street, London, W.1

Local Office: 49 Rodney Street, Liverpool

MEMBER OF THE METAL  WINDOW ASSOCIATION

Modern joiners make full use of EVO-STIK 'impact'



Do you?

The adaptability of Perstorp laminated plastic board combined with the strength of Evo-Stik 'Impact' adhesive 528 have been used to produce interesting curved effects in the kitchen of a bungalow at Hutton, Essex. The laminate is bonded to 1" Novobond on both sides and the work was carried out by B. & H. (Woodworkers) Ltd. of 22 Palmerston Road, Wealdstone, Harrow, Middlesex, with materials supplied by C. F. Anderson & Son Ltd.

Evo-Stik Impact Adhesive techniques have been developed for a great variety of modern building operations. If you have sheet materials of any kind to apply to any surfaces we shall be glad to advise you of ways in which accurate bonds of great strength can be obtained with a minimum of labour.



EVO-DE LTD. (INDUSTRIAL ADHESIVES DIVISION),
COMMON ROAD, STAFFORD. TEL: 2241 (5 lines)
LONDON OFFICE: 82 VICTORIA STREET, S.W.1 ABBEY 46223
Manufactured in Eire by Evode Industries Ltd., Swords Co. Dublin.

Fill in this coupon

- Please send me brochure giving full technical details of Evo-Stik adhesives.

NAME _____

ADDRESS _____

today becomes rare through the mere passing of time.

There are better things in Bagdad than Rashid Street to preserve. There are the few old Turkish houses, for instance, on the west bank of Tigris, with wooden balconies and pillars and pleasant airy rooms and loggias all falling to decay: or the *suqs* which could be improved merely by paving, and by roofing everywhere with such brick domes and arches as still show here and there. They make the pleasantest of all walks for shoppers in a hot land and should be carefully kept and looked after wherever they exist.

Apart from the preservation of an historic



1, arcaded walks give essential shade.

record, there are, in every country, details which the life of the country itself has discovered and adapted to its own needs and conditions. They give a use and a cachet to its architecture and differentiate it from that of other lands. These details are valuable and should be carefully noted and adopted, however much the general styles may be imported from abroad.

Now even in Rashid Street, clumsily



3

conceived from Europe, such pure Babylonian touches can still be seen. They are more easily visible now than they used to be, since the good new asphalt has mitigated the ancient dominion of dust!

Across an almost unbroken procession of rich cars, or beyond the policeman in his smart new uniform, 1, solitary during the siesta hour, one can appreciate the narrowness and consequent cool shadow of sidestreets, so welcome in summer, 3. The porticoes are poor Mediterranean adaptations, for their shade here is quite insufficient, but the ironwork above them is good, adapted here and there to harim windows; and the underside of balconies with their rich detail, 4, gives a pleasant finish to these colonnades.

It is in looking at such detail that one remembers the peculiar distinction of Iraq architecture from its first beginning in the Sumerian South—the using of brick for ornament in a land deprived by nature of stone. The Mustansiriyah, which is now being restored and attended to, is a monument of this art, built on the Tigris bank by the Caliph Mustansir in A.D. 1233. The skill continues through the Ottoman rule to modern times; King Faisal I's mausoleum and other public buildings exhibit it; and in Rashid Street, built a few decades earlier, there are façades with panels of carving that go back to the ancient craft, 5.

All this will soon go. Already there are empty spaces where the rubble is heaped and the bull-dozers are at work, and iron



4



5

2, old Bagdad still survives on the river bank, but new buildings increasingly dominate the skyline.
3, narrow alleys and overhanging balconies give shelter from the sun.
4 and 5, elaborate detailing on balconies and carved panels of brickwork reflect the survival of ancient crafts.



2

girders, carried with an Assyrian look on the backs of Luristanis from the eastern mountains, are stacked ready to build the new tall sky-line of Bagdad. It expands, from the axis of Rashid Street towards the river, where the old houses with their balconies show the flood-line level. Each balcony is stretched on its own shadow, and hangs within slender wooden pillars over yellow brick walls built with the native dust. For many millennia this has been carved into dwellings, and the domes of mosques are scattered about it, more turquoise than the sky. The minarets of various ages stand like candlesticks here and there. The jade-green modern bridges cross the water, with fine and easy curves of great beauty; and the tawny flood itself waxes and wanes, according to the seasons, between dust-coloured bends.

The white cement background of our time lifts itself high, 2, behind this ancient picture. Every year it encroaches—nor can one feel more than a purely personal and sentimental regret for the dingy little by-ways as they disappear. To introduce the new with judgment, in Bagdad as elsewhere, is the architect's problem: to keep what the ages have tried and found relevant, and to discard the rest; and, by such judicious mixture, to mark his buildings with the peculiar stamp of his country and his age.

Frey Stark

COUNTER-ATTACK

TROUBLE IN THE VALLEY

Planning is for the people. Perhaps this is a self-evident truism to most REVIEW readers; it does not seem to be so to the Glamorgan County Planning Office. Their proposals for the town of Aberdare as incorporated in the County Development Plan have earned them a petition of 17,000 unsolicited protests, nearly half of the total population of the urban district: this issue alone has replaced four local councillors by independents at the last election in a town which was and is Socialist almost to a man. Yet, having aroused this hornet's nest, the County Council will not give an inch: they have Made Their Plan, they have Taken Up A Position (and the Aberdare UDC, carried along rather unwillingly, have Taken It Up with them) and face has got to be maintained. Somewhere in this the electorate has become something to be fought, not served—it is a familiar, unhappy situation. Now the whole county plan has gone to public inquiry, which will be held this month; the part relating to Aberdare should provide some lively reading.

What has caused this spontaneous opposition is the designation of eight redevelopment areas which together affect directly about one-third of the people in the town (and being a close-knit place, almost everyone is affected indirectly; there is hardly a person without a friend or relative in the threatened areas). The houses involved are



1
2



3
4



1 and 3, the humane quietly elegant pattern of old Aberdare—part of one of the redevelopment areas; 2 and 4, the inhuman waste land created in the name of sound replanning and modern space standards: two views of a new council estate south of the town.

nearly all comely hundred-year-old stone built terraces, 1 and 3, which are structurally sound, cheap to buy (about £600; shades of Chelsea!) and easy to convert: one owner has taken out and rearranged all the internal walls and ceilings, another is growing grapes and begonias in an indoor-outdoor room that was the yard. Most of the houses are freehold—they are ideal for young couples and old people—and the planners seem quite prepared to give the owners half a lifetime of unhappiness and uncertainty whilst they phase their programme map. The Council say, as some sort of excuse, that most of the redevelopment will not happen until the 1970's. With the town already £2½ million in debt this is not surprising, but meanwhile the owners lose heart, are unsettled and unhappy for years and will let the whole place run down, whereas at the moment they enjoy living in their houses and are prepared to improve them. Development Plans should remove slums; this plan threatens to create them.

The only reason that can be found in the development plan for treating these happy enclaves as something equivalent to the worst parts of Salford or a badly bombed area of Bristol or Liverpool is that they are at too high a density. In fact the highest existing net residential density quoted is 72 p.p.a. and the average is around 60 p.p.a., figures considerably less than those used in creating internationally admired terrace houses (not flats) in London; the psychological effect of the density is made much less because there is open country within half a mile of almost every house, and, in any case, the people themselves enjoy living close together.* So why on earth should a humane liveable pattern be

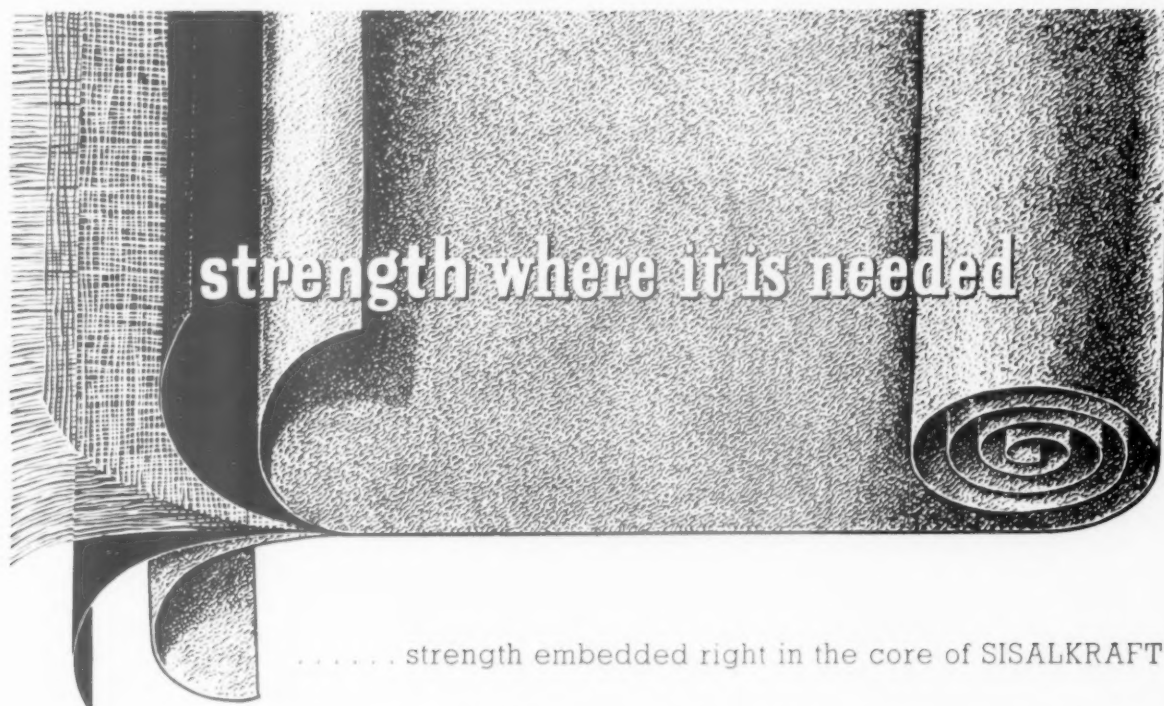
changed simply to conform to a statistic dreamed up without any relevance to Aberdare or the people who live there? This is simply planning megalomania.

What is likely to replace these houses can be guessed well enough from the latest council estates, 2 and 4 (and South Wales has some of the worst new council housing in the country). At the same time the corner shops, 5, which tie the old neighbourhoods together will be shunted off into inaccessible shopping arcades. Areas allocated for new housing (needed almost entirely as a result of this game of musical chairs) do not attempt to infill or re-use derelict land, of which there is a lot around Aberdare, but cut big slices out of the best remaining farmland in the valley, thereby taking away Aberdare's great natural advantage over the other valley towns—that it is in a spacious



5, the corner shop, handy, companionable and cheap—yet 'all new neighbourhood shops shall be located within the various secondary shopping centres.'

* Our attitude would be exactly the same if the council had wished to raise the density against the wishes of all the inhabitants—a situation which has in fact occurred in some of the Bureau's other cases.



..... strength embedded right in the core of SISALKRAFT by the unique reinforcement of tough, nonhygroscopic, unspun sisal fibres that are laid in both directions and sealed in two layers of high grade bitumen and covered by outer sheets of stout kraft paper. This 6 ply construction gives the tough, supple strength of SISALKRAFT, making it easy to handle yet exceptionally tear resistant and proof against moisture and damp.



the supreme building paper

A PRODUCT OF BRITISH SISALKRAFT LIMITED

Please write for information and samples to the SOLE DISTRIBUTORS:

ESTABLISHED OVER A CENTURY

J.H. SANKEY & SON LTD

ESSEX WORKS · RIPPLE ROAD · BARKING · ESSEX

PHONE:

RIPpleway 3855

GRAMS:

BRICKWORK · BARKING

PUTTING IN THE DAYLIGHT

...at
**Messrs Colville's
new Ravenscraig Works**



The metal windows chosen for the extension to Messrs. Colville's steel works had to be good. Steelmen have a critical eye for any product made with the materials they produce. Standard Maclean Metal Windows were chosen—Standard Maclean make a really thorough job of rust proofing their product. Their Electro Galvanising plant is fully automated, which ensures that no damage is done by careless handling during the finishing processes.

Technical note: all Standard Maclean Metal Windows are degreased, pickled, zinc plated and phosphated, then two coats of primer are stoved on separately. 'Z' section mild steel sections are flash welded for frame construction, whilst the fittings are of manganese brass and are screwed on.

**Standard Maclean
Limited**

STANDARD MACLEAN LTD. CADZOW WORKS, LOW WATERS RD, HAMILTON, Lanarkshire

Hamilton 1410/4

ABERDEEN: 13 Bridge Street, Tel.: Aberdeen 52331. **EDINBURGH:** 7 Albany Street, Tel.: Waverley 2190. **NEWCASTLE:** 14a Pilgrim Street, Tel.: Newcastle 27776. **BELFAST:** 32 Ann Street, Tel.: Belfast 32003. **LONDON, W.C.1:** 1 Warwick Court, High Holborn, Tel.: Holborn 2462. **MANCHESTER:** 11 Norfolk Street, Tel.: Blackfriars 4171. **WEST BROMWICH:** Houghton Street, Tel.: West Bromwich 0405. **WORTHING:** 30 Manor Road, Tel.: Worthing 7495

PD4



6

6, Aberdare from the Maerdy road. Open space and density figures ought to be given a new interpretation here when there is a whole mountain-side within walking distance—yet the standard figures have been blindly applied throughout.
7, the disused railway which forms a natural internal by-pass high above the town on the south side. In the Development Plan it stays a disused railway.
8, the Dare valley looking back at the town centre. All it now contains is disused colliery buildings and a moribund pit railway. It would become a linear park which could start in the middle of the town; the Development Plan does not mention it.
9, church spire, trees and pub; one of the many vignettes which make the centre of Aberdare a place, not an agglomeration of utilities. A true Development Plan would describe this character and show how it might be preserved and augmented.



7

agricultural valley, not simply a set of houses jammed between one mountain side and the other; the pattern is shown in the panoramic view from the mountain side to the west, 6.

With all these faults, good positive planning was hardly to be expected. Yet even to the eye of the short-term visitor (and this note does not pretend to be anything more) there are fine things in Aberdare, existing and potential. There is a derelict railway line high above the town to the west, 7, which could form a relief road giving splendid *corniche* views, and there is another derelict tramway on the east side. Instead of using them the main road-widening proposal slices through a lot of property in the centre of the town and finishes grandiloquently on the wrong side of a narrow hump-backed bridge at the meeting place of five roads. There is a steep picturesque valley,

8, containing another pit railway (soon to be closed), which runs right into the centre of the town and could form a linear park right from the Town Hall and the old churchyard to Aberdare Park, the creation of a more enlightened generation of planners. The town centre has a delightful townscape effect which could be accentuated in new building—the church is on a leafy knoll entirely surrounded by shops so that the tower and spire are always appearing behind a different combination of buildings, and foliage, 9.

All these things and many more like them could have been in the development plan; they could still be in it if the local bureaucracy would deign to listen to the wishes of the people whom it is supposed to serve. It will be a bad day for democracy as well as for town planning in Britain if it doesn't.

Ian Nairn



8



SKILL

SCANDINAVIAN STUDIES IN BUILDING CLIMATOLOGY

Building climatology is a name now being given to studies of building science embracing lighting, heating and ventilation—aspects of building science in which the natural elements must be blended with artificial aids to efficiency and comfort. When the lighting specialist has to determine the economic efficiency of a window system he finds himself often at cross purposes with the heating engineer, and realizes that what pleases him by letting in plenty of light annoys the heating man by letting out too much heat. The building climatologist, with equal interest in heat and light, can work out the best compromise without prejudice.

Specialization can be carried too far in a matter like the design of a building, and in Scandinavia as elsewhere efforts are being made to co-ordinate lighting, heating and ventilation studies. It is the lighting people like Dr. Gunnar Pleijel, of Stockholm, who are initiating this move, for it is recognized there, as it is here, that it is the natural lighting primarily which determines the basic design and structure of the building.

Building climatology, includes studies of natural radiation and climate (temperature, wind, rain, cloud, daylight illumination, etc.). There is consequently a close link between the work of the meteorologist and that of the building climatologist, as well as with the lighting and heating specialists. Some effort has been put into the measurement of the relation between total sky radiation and illumination. One of the practical uses to which such information can be put is the determination of daylight intensities from the wealth of total radiation data which is available from almost all meteorological stations throughout the world. Whereas very few stations measure daylight levels and variations, very few do not measure total radiation. If we have an acceptable figure for this 'luminous efficiency' of natural radiation, that is, the proportion of the total radiation which is received as visible light (i.e. not heat, or infra-red or ultra-violet radiation) we can draw up graphs or tables for the daylight variations as well. A figure which is meeting some acceptance as a useful average is 120 lumens per watt of received radiation. This will vary with the spectral quality of the radiation, which in turn depends on climatic conditions, but the value of 120 lumens per watt is a useful first approximation for the conversion factor.

During recent years the Faculties of Architecture in the Swedish Institutes of Technology have shown an increasing interest in Building Science. Strong departments of Building Science exist in their own right, but in addition the architectural faculties themselves have either sponsored or assisted groups of research workers. Professors Zindahl at Gothenburg and Åhrbom at Stockholm have been in the forefront of this movement. The work of Gunnar Pleijel in Stockholm on daylight has been known and respected for some long time in England, as has that of the late Harry Kreuger on building economics.

Professor Åhrbom's Department has recently moved into a new building in the Royal Institute of Technology in Stockholm, and this has given Dr. Pleijel the opportunity to expand the work of his group to include all aspects of natural radiation in relation to architecture and town planning. Natural lighting is still given prominence, but perhaps the most interesting recent develop-

ment is the work in window protection protection, that is, from heat losses from inside the building, or from unwanted heat gain from outside.

A Study of Window Protection Devices

The background to this work is the careful fuel conservation policy of the Swedish Government. Sweden has very little natural fuel, apart from wood (which is wanted for other purposes), and so it is a matter of vital national policy to do everything possible to utilize only the most efficient means of generating heat and to prevent its wasteful dissipation. One measure of legislation is the offer of increased capital loans to developers who undertake to install triple-glazed windows in new buildings. This measure has had its effect. One result is that the manufacturers of other means of window insulation have sought to have their products included as subjects for the State's beneficence, by demonstrating with authoritative scientific data that the degree of insulation which they give is comparable with that of a third pane of glass.

The investigation at the Royal Institute of Technology was carried out in a series of nine identical insulated boxes, 1, set up on the roof of the building side by side, with a free horizon. The boxes, of about one metre cube interior, were constructed of wood with a thick layer of insulating material around all sides except the two sides intended to represent the windows. These two sides were orientated towards the north and south, and could be filled either with a window or with insulation similar to the other sides. An exterior roof of galvanized iron was laid over the whole row of nine boxes. The boxes could each be heated internally by carbon filament lamps, whose energy consumption could be measured, and continuous recordings of the temperature conditions in the boxes were made.

The effect of a protection device such as a venetian blind placed between the double panes of the windows in the boxes could be assessed by the difference between the temperature inside and that outside the box, as compared with the difference in a box without a device. The maximum value of this comparison figure was taken as a measure of the efficiency of the

protection device in keeping out natural radiation.

In a similar way the efficiency of the device as a protection against loss of internal heat could be assessed by the ratio of the temperature difference with and without the protection device, when each box was supplied with the same amount of heat from the carbon filament lamps.

Certain preliminary experiments were made to determine the heat constants of the boxes, before the experiments proper began.

For the studies of the effectiveness as protection against natural radiation, the windows were orientated towards the south. Various protection devices were installed in the windows. Of the nine boxes, the two end ones were dummies, the second from one end was without a protection device, and so acted as the monitor, leaving six for the tests. The materials tested were as follows:—

A. Pleated paper blind, white, between glass panes.

B. Pleated paper blind, dark blue, between panes.

C. Flat paper blind, with aluminium foil surface facing inwards, between panes.

D. Flat paper blind, with aluminium foil surface facing outwards, between panes.

E (i). Flat paper blind, with aluminium foil facing both ways, between panes.

E (ii). Ditto, with airtight joints.

F. Venetian blind with glossy aluminium slats set vertical between panes.

G. Venetian blind with lacquered slats set vertical between panes.

H. Isoflex (a material consisting of layers of cellulose acetate arranged honeycomb fashion, so creating pockets of air), three layers of clear foil, placed between panes.

I. Isoflex, two layers of clear foil, one layer of white diffusing foil, placed between panes.

J. Exterior white sun blind, set at 45° inclination from the upper edge of a closed double glazed window.

K. Exterior red sun blind, set at 45° inclination from the upper edge of a closed double glazed window.

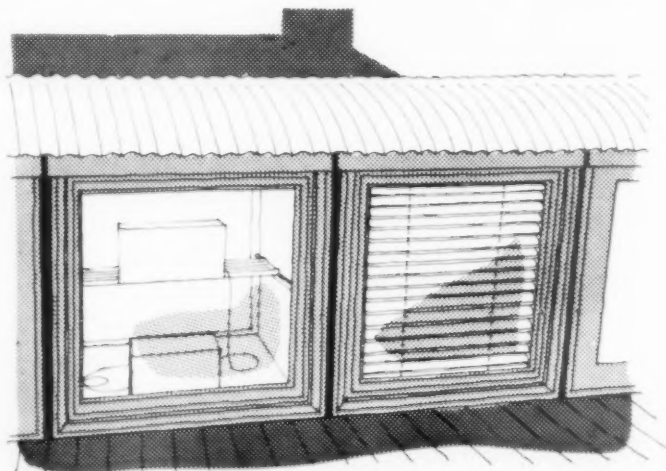
L. Exterior blue sun blind, set at 45° inclination from the upper edge of a closed double glazed window.

In addition, measurements were made of the heat losses through clear single, double, and triple glazing without any protection, and of a single pane of glass with a single white pleated paper blind behind.

A summary of the results obtained by Pleijel is shown in the Table. The full report of the work is now available from the Swedish Committee for Building Research, or from the Royal Institute of Technology, Stockholm.

As protection against solar heat gain, the aluminium faced paper blind is very good, as are the venetian

[continued on page 273]




1, the boxes used at the Royal Institute of Technology, Stockholm to test window insulation devices.



New look for the South Bank

Hercules House is the latest and most striking addition to the new architecture of London's South Bank. This project was initiated and administered by Dolphin Development & Management Co. Ltd., a member of the Costain Group. The contract stipulated the greatest permissible amount of floor-space, plus speedy erection — but within a strictly controlled budget. Effective co-operation between architect, engineer and builder — working as a team from the earliest stages of the project — has fulfilled these requirements, and produced a very handsome building. You can count on Costain's for this dependability wherever skill, speed and economy in construction are needed, irrespective of the size of the contract.



Architect: RICHARD N. WAKELIN, F.R.I.B.A.
Consulting Engineers:
E. J. COOK & COMPANY (ENGINEERS) LTD.

Richard
COSTAIN
Limited

BUILDING & CIVIL ENGINEERING CONTRACTORS • LONDON • ENGLAND

Home Branches: Plymouth, Canterbury, Newcastle, Grays, Bristol • MIDDLE EAST • RHODESIA • NIGERIA • CANADA • WEST INDIES

LEISURE CULSYNKS

- * **LOW COST** Economy and Leisure go hand in hand. Though made from the finest materials, a Culsynk costs remarkably little.
- * **DURABLE** All Leisure Culsynks are vitreous-enamelled steel, so will stand up to continuous hard wear.
- * **COLOURFUL** Colour in the kitchen is becoming increasingly important, in even the humblest of homes. And Culsynks can be cream, blue, green, or white.

Inexpensive . . . hard wearing . . . attractive
. . . the Leisure Culsynk is unequalled

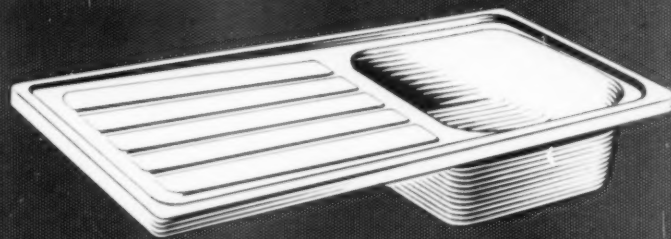
Write or telephone for further details to:

LEISURE KITCHEN EQUIPMENT LTD
(PROPRIETORS: ALLIED IRONFOUNDERS LTD)

NOTTINGHAM ROAD, LONG EATON, NOTTINGHAM
Telephone: Long Eaton 4141

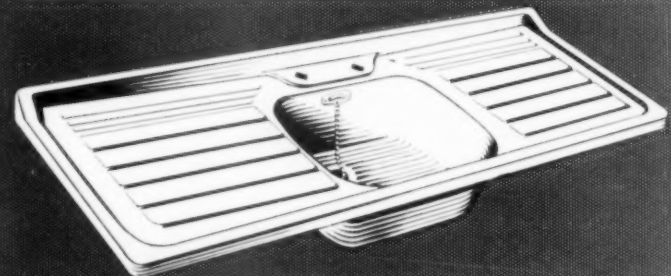


LONDON SHOWROOMS: 149 REGENT STREET, W.1
Telephone: REGent 8355



THE 18/42 REVERSIBLE CULSYNK

Designed mainly as a replacement, it is very cheap to install, as existing wall taps may be used. Size 18½" x 42½". Other single-drainer Culsynks are made with tap holes (at 7" centres), splashback, and bowl on either hand. Sizes are 18" x 36" or 21" x 42".



THE DOUBLE-DRAINER CULSYNK

can be 18" x 54" or 21" x 63". As with all Culsynks, it is drilled for 1½" waste and can be supplied with or without overflow. And Culsynks are available with rustproof steel cabinets in matching or contrasting colours.



another attractive
carpet design by
CARPET TRADES
CONTRACT SERVICE

One more proof of successful co-operation, with client, architect and carpet manufacturers meeting for personal discussion and consultation. Carpet Trades Ltd. offer this specialised service to all their contract clients. The carpet installation shown here, produced exclusively for Royal Mail Lines, is in the 1st class dining room of *R.M.S. Andes*. The carpet, designed to the specification of the architect, is in 'Sentinel', another high quality fine woollen Wilton, with a striking modern design on a tan background. (Goods are supplied through normal trade channels only).

CARPET TRADES LTD. KIDDERMINSTER

continued from page 272]

blinds with vertically adjusted slats, and also the roller sun blinds which seem to be equally efficient whatever the colour. The white paper blinds transmit both light and heat but subjectively the effect is different. A reduction by a third accompanied by diffusion is a useful degree of protection from excessive solar heat, yet ample light is transmitted for efficient visual work on sunny days.

This is a great advantage on sunny days when protection is needed against excessive sunlight, yet there must be enough light to work comfortably. (The light transmission of the paper blinds is about 17-20 per cent.)

The aluminium faced paper blinds are of course opaque, and have their uses chiefly after dark to conserve internal heat. Isoflex transmits too much solar heat to offer any useful protection, but has the advantage of a high light transmission. Its main purpose is, however, to conserve internal heat.

Pleijel's studies (see table below), however, were conducted under conditions much more in accord with everyday practice than the previous laboratory studies. Here in England special note might be taken of the

effectiveness of aluminium foil layers and of the usefulness of a simple white paper blind hung behind an ordinary English single glazed window. (Or perhaps one should be cautious here—the standard of joinery attained by window manufacturers in Sweden appears by inspection to be higher than in England. A single glazed window loses heat only by transmission in Sweden, and not by draughts through multiple apertures left by the manufacturer or made by the builder and the weather as over here.) Samples of the aluminium foil blinds were obtained, but at the moment it is clear that many manufacturing problems will have to be solved before these blinds can be marketed cheaply.

Pleijel is extending his studies to include problems of ventilation. His unit when fully operative should cover much the same range of study as that of the group of investigators at the Texas A. & M. experimental research station under Caudill and Reed, who, it will be recalled, have published extensively in the field of lighting and ventilation applied to building design, and have put their findings into practice in many interesting school designs. A wind

tunnel is to be built in a long underground room very well suited for the purpose.

Lighting of Factories

Meanwhile the daylighting studies for which Pleijel is best known in this country have continued with some interesting results. Of perhaps special interest are the studies of the natural lighting of factory buildings. In England there was a great deal of activity in the field of factory lighting during and at the end of the war, but since then daylight research has been concentrated mostly on other types of building, especially schools, offices, laboratories and hospitals. This has probably been because the problems posed were the most rewarding from the point of view of co-operation between architect and scientist. The end point could be clearly defined in visual terms, and there was the attraction therefore of architect and scientist seeking together a solution satisfactory in both photometric, visual, and architectural terms. Factories, on the other hand, are so often required to be 'flexible' or 'all-purpose,' that the study of their lighting problems has interest only for those concerned with the purely computational side. All the factory designer asks of the lighting consultant is that a certain quantitative level of natural light should be achieved with the least cost in glazing, heat loss and maintenance.

To any one with this interest in the computational side there is certainly plenty to do. One study of special interest from both the daylighting and the architectural point of view is that undertaken in connexion with the design by Ove Bull of the new Sundbyberg cable factory for Max Sievert Kabelverk (a subsidiary of the L. M. Ericsson group, for whom Herr Bull is the Building Supervisor). The fenestration of this factory is entirely by glass block, except for the view windows of the dining room on the top floor.

As Sweden does not manufacture glass block, it had all to be imported from the USA at high cost. In spite of this, the overall cost of the building was not high, as the glass block fenestration lent itself to the type of construction with lightweight concrete blocks (Siporex blocks with foamed plastic interleaving). The fenestration consists of long sections of glass block in both roof and side walls. The building is approximately 60 by 77 metres on plan and the long axis is orientated ESE-WNW. The daylight illumination is achieved by transverse rows of glass blocks in the plane of the roof supplemented

by lengthwise bands of glass blocks on the long facade. The glass blocks are all of the double-welded vacuum type. Side lighting is provided by a continuous run of block, 3 metres high from the sill, comprising fifteen blocks, of which the top eleven are diffusing and the lower four are clear to give some view outside. The roof lighting consists of a continuous run of diffusing glass block, 4 metres wide. Before the building went up, model studies were made to determine the distribution of light and the levels of daylight factor. An analysis of the lighting economy was made, paying regard to heat losses, cost of artificial light, and the maintenance costs. The optimum was found to be with 4-metre broad glass block strips. It was also established that the yearly cost per square metre of floor area would be about 3s, higher with a saw-tooth roof of 22 per cent window factor than with the 4-metre glass block system. Only running costs were considered in making this comparison. The designers believed that the overall costs of the glass block-cum-Siporex lightweight concrete system of construction were considerably lower. Costs, of course, are based on Swedish prices of materials and labour, and may not be relevant in England, but the building is undoubtedly a good one and deserves careful study over here.

The total daylight factor was determined by Pleijel to be 4 per cent, but is said to be somewhat higher. On a recent visit no measurements of daylight factor could be taken because the day was clear and sunny, but the level of indoor illumination, even with a considerable amount of snow on the roof, was 80 lumens per square foot. The well-known faults of glass block glazing, especially excessive glare from concentrated sunlight in the clear blocks, were, however, present. On dull days, however, the result would probably be reasonably comfortable and certainly adequate in level, except in winter, for the type of work going on in the building. An adequate artificial lighting installation is also provided, and is believed to be in use fairly continuously during the winter.

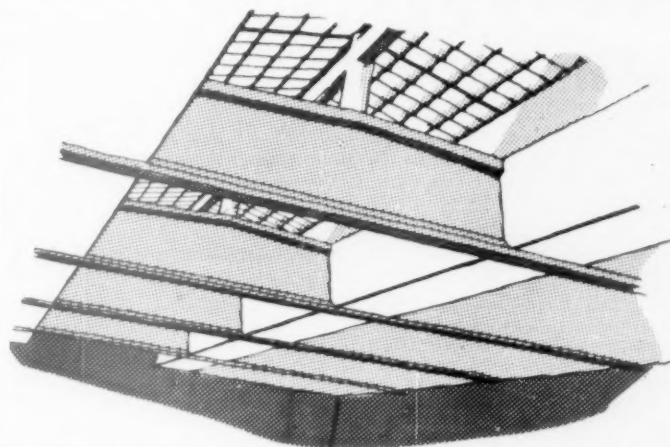
The canteen in this building is a most pleasant, airy and light place. A combination of side and top light ensures an adequate level of light, and a good view through the side windows which here alone in the building are of clear glass and not of glass block. The roof, 2, incorporates a built-in system of artificial lighting of considerable interest. 'Daylight' type fluorescent lamps behind fluted

table of results

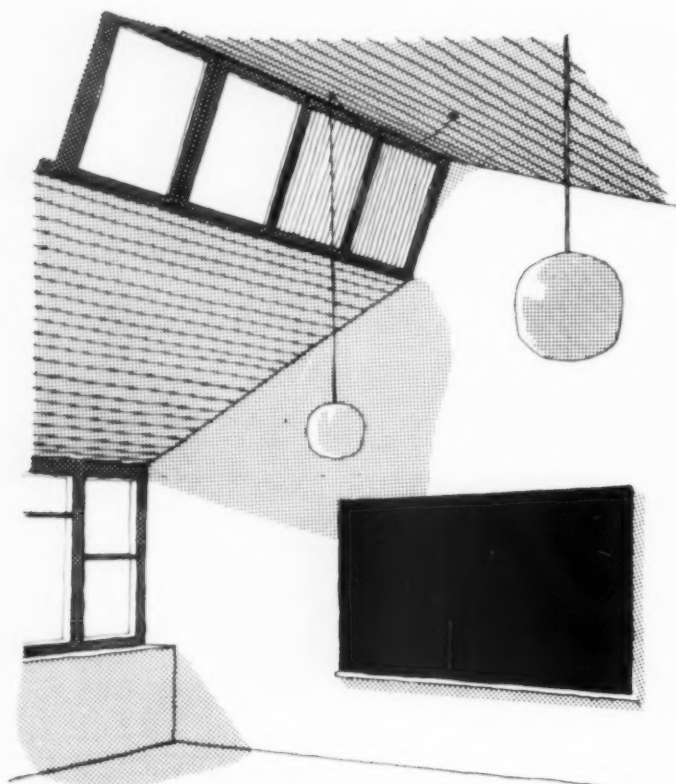
Measured on various window protection devices by Dr. G. Pleijel at the Royal Institute of Technology, Stockholm.

Protection Device (between panes of double glazing unless stated otherwise)	Solar heat transmission $\frac{100}{\%}$	Heat loss of internal heating Kcal/m ² h°C
A White pleated paper blind between double glazing	35	1.68
B Dark blue paper blind	50	—
C Flat paper blind with aluminium foil facing inwards	28	1.34
D Ditto, facing outward	21	1.34
E (i) Ditto, facing both ways	14	1.16
E (ii) Ditto, with airtight joints	—	0.94
F Venetian blind with glossy aluminium slats set vertically	25	1.50
G Ditto, with lacquered slats set vertically	31	1.80
H Clear Isoflex	79	1.61
I Isoflex, two layers clear, one layer diffusing	68	1.61
J Exterior white roller sun blind set at 45°	26	—
K Ditto, red	24	—
L Ditto, blue	22	—
M Double window without protection device	—	2.22
N Triple window without protection device	—	1.61
O Single glazed window	—	3.63
P Single window plus white paper blind	—	2.19

The values given in the Table can only be taken as relative, and applying to the experimental conditions. It would be unwise to convert them into British working units and then attempt to compare them with published figures, unless the precise experimental conditions for both sets of figures are known and can be allowed for. For conversion, 1 Kcal/m²h°C = 0.205 B.T.U./ft²h°F.



2, in the canteen of the Max Sievert cable factory at Sundbyberg, (near Stockholm), the roof lighting is supplemented by fluorescent lighting which blends well with the daylight.



3, top light in the Mørkøbj School, Tøftesø, Denmark, designed to increase the uniformity of daylighting from one side only.



4, typical 'set back' section used in Danish schools.

diffusing plastic sheet blend with the sky light from the roof, supplementing the daylight on dull days efficiently but imperceptibly. After dark the fluorescent lighting is supplemented by decorative lighting to enliven the character of the room. The levels of lighting are high by day or by night, but there is no excess of light, and one is not conscious of glare or overpowering brightness. Good acoustics and a high-fidelity system for music, announcements and works concerts add to the amenities of the place.

Lighting in Schools

Scandinavian schools differ in some respects from our own, not least in the systems of education which lie behind them. The ideas of free play and movement in the classrooms themselves which are a feature of English post-war education are as fully accepted in theory in Scandinavia but are not so much practised. This might be denied by some Scandinavian educationists, but personal experience, by visiting English people demonstrates that rarely, if ever, does one go unannounced into a Scandinavian classroom and find the children anywhere but at their desks arranged in formal rows.

The designs of classroom reflect this basic attitude to education. Great pains are taken to ensure that good light comes in plentifully from the left side only (all Scandinavian children must be right-handed); this demand does in fact determine the whole aspect of the school.

One of the main differences between English and Swedish practice appears to be in the attitude to ventilation. Scandinavians, especially Swedes, abhor all draughts. In Sweden and Denmark windows are only opened to give quick ventilation after one class has left the room, and are closed again when the next comes in. They are not often opened during the heating season, and not at all in the really cold weather.

The result in Denmark, 3 and 4, is a basic design of school section consisting of a large low window and a supplementary small high window set back towards the middle of the

room. In Sweden there is rather more variation, because more multi-storey schools are built, but the light is still planned to come from the left. One particularly interesting solution is that by Carl Nyren for the Mörby Laroverk near Stockholm. There is a main low window on the left, and a novel form of lantern to the right, the ceiling sloping upwards to this lantern. The lantern window itself faces in the same direction as the main window (south), but the light is collected in a white enclosure above the ceiling, diffused and re-directed into the room off a white wall. Direct light is prevented by a set of louvres at ceiling height from reaching the rear wall. The back wall is consequently evenly lit, and the lighting in the whole of the back part of the room is supplemented by a gentle suffusion which does not destroy the directional character of the main lighting.

This solution is a particularly happy one in sunlight. The main window must, on occasions when the sun is low, be shielded by light curtains, and the warm diffused sunlight coming in through the lantern brightens up the whole room.

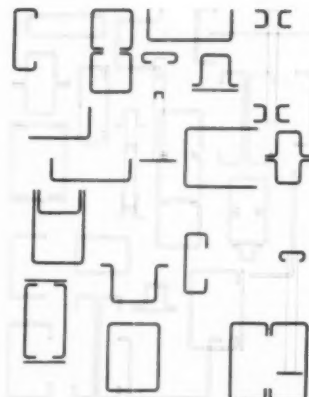
Perhaps some of the Scandinavian solutions to the school lighting problem may not please us here in England, but they have been very carefully worked out. Their solutions please the Scandinavians, and they believe that they are often better than ours. Lighting, in fact, figures very high on the list of those things which go to make a good school. Professor Steen Eiler Rasmussen summed up the Danish attitude — 'the most important effect of good lighting is not so much that it enables people to see better, although that is obviously important, but that it should have a stimulating and lasting effect on them, both teachers and children, which cannot be supplied by heating, or comfortable furniture, or books, or colourful accessories.' In Sweden too it was stated that 'the main advantages of good lighting are that children and teachers alike are kept fresh and alert all day. Once the minimum level of light necessary for adequate seeing has been passed, the effect on vision is of secondary importance.'

THE INDUSTRY

Cold Rolled

The advantages of cold over hot rolled steel sections are at least as much architectural as structural. For though their use does not always show a saving in weight of steel over the use of hot rolled sections, it will in almost every case show a saving in finishes and in fixing. For cold rolled sections are at once more acceptable to the eye (i.e. they do not have to be covered up) and as they follow a more straightforward rectangular profile (what a beast the traditional hot rolled r.s.j. is in this respect!) they are easier to fix to and to trim against. Indeed, when we look into the matter we see that the good American vernacular and the good English (schools) vernacular are both based on the visual and structural simplification which comes from their use. It is, after all, natural that this

should be so, for cold-rolled sections are inseparable from prefabrication. An interesting booklet on this subject, produced specially for architects, with the title *Cold Rolled Structural Steelwork*, has just been produced by James W. Ellis & Co. Ltd. It describes in turn the application to box stanchions and beams, to two-storey construction, to lattice girders and roof trusses, and to lattice beams; and concludes with two particularly interesting chapters on clerestory construction and curved trusses. The whole contains much useful information, though not quite as much as we could wish. How greatly the use of these sections would be encouraged if architects were provided with tabulated data similar to that available for hot rolled sections. Though it is comforting to know that the manufacturers have a design staff



1, selection of types of cold rolled steel sections.

willing and able to help, this is no substitute. James W. Ellis & Co. Ltd., 127 Victoria Street, London, S.W.1.

Steel Partitioning

Sankey Sheldon have recently installed some of their new Picture Window Partitioning in a bank shown in 2, overleaf. The partitioning can be dismantled and re-erected without damage to the floor. This is achieved by fixings at approximately 4 ft. centres with a patent fixing screw about 1 in. in length which leaves a small hole of 1 in. diameter when the partitioning is removed. The screw is punched down and the hole filled. It is claimed that any form of glass may be used, including double glazing, and the partitioning itself is lined with *Stillite* packing, which has been subjected to fire tests and been approved by the L.C.C. Wiring channels are housed in either skirting or transome, two accessible ducts being provided, one for the G.P.O. and the other for general internal use. The makers claim that two men can erect 100 ft. run of partitioning in four days complete with glazing. The approxi-

[continued on page 276]



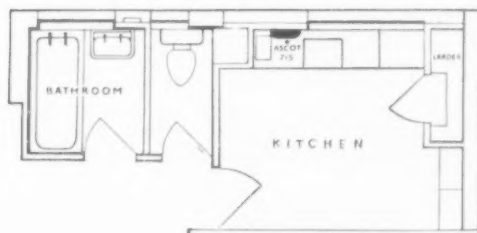
Tower Court Flats, Clapton Common

ASCOT IN NEW HOUSING (7)

Tower Court Flats, Hackney, is one of a number of schemes designed by different architects around the perimeter of Clapton Common for the Hackney Borough Council. Tower Court consists of 2 blocks of flats: a four-storey block containing 16 two and

three-bedroom maisonettes, and a nine-storey block containing 51 flats of bed-sitting room, one-bedroom and two-bedroom design.

To provide an instantaneous hot water service throughout all the flats at Tower Court, Ascot 'balanced flue' multipoints were installed in the kitchens.



PLAN OF KITCHEN AND BATHROOM IN A TYPICAL
TOWER COURT FLAT SHOWING POSITION OF ASCOT 715

RESPONSIBLE AUTHORITIES

Director of Housing Development: Geo. L Downing,
O.B.E., M.I.C.E., M.I.Mun.E., A.M.I.Mech.E.

Architect: Harry Moncrieff,
F.R.I.B.A., A.M.T.P.I.
of Co-operative Planning Ltd.

Contractor: Direct Labour.



ASCOT GAS WATER HEATERS LTD • 255 NORTH CIRCULAR ROAD • LONDON • N.W.10

WHG/4305

A member of the PARNALL Group of Companies.



2, 'picture window' steel partitioning.

mate cost including glass is quoted as 12s. to 17s. per sq. ft. installed depending on modules, etc. *Sankey Sheldon Ltd., 46 Cannon Street, E.C.4.*

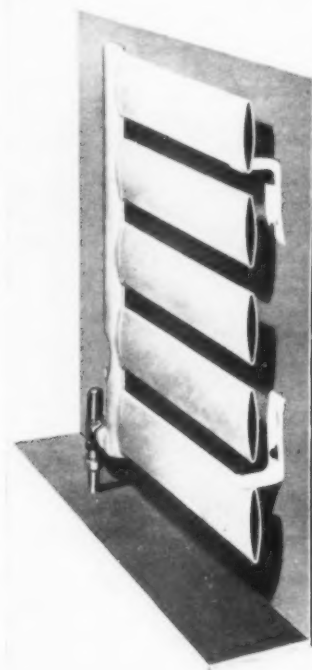
Wall Radiator

A new type of wall radiator for hot water central heating, manufactured by Washington Engineering Ltd., consists of a horizontal arrangement of narrow elliptical section tubes placed one above the

other, in four different overall heights, and may be obtained in lengths up to 20 ft.

Performance is claimed to be equivalent to the normal panel radiators of similar overall face dimensions, and superior to the sectional type of radiator in having a higher heat emission through radiation rather than convection. Wall mounting is advised, and with both single and double banks it is claimed that cleaning at the back is simple, since the space behind the radiator is

easy to get at. This is a virtue which does not always apply to the wall mounted type panel radiator. *Washington Engineering Ltd., Washington, Co. Durham.*

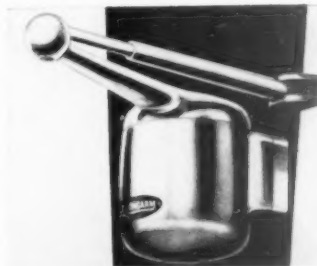


3, radiator with elliptical tubes.

Door Closer

Door closers by the nature of their function, are prominent objects. It is therefore encouraging to find consideration being given to their appearance by manufacturers. The illustration shows the 'Strongarm' door closer of welcome simplicity and with few dust traps. Finishes available are Chrome, Copper Bronze (B.M.A.), Contemporary Enamel, and Silver Mist (which the makers liken to stainless steel). The closer is designed to close at a constant rate over a wide and variable range, and is smooth and silent in operation. The hydraulic fluid used is not affected by climatic extremes. The fixing is concealed, thus rendering the closer thiefproof, and suitable for use on glass doors. It is also exceptionally easy to install, and this is further assisted by its being light in weight.

Armstrong Patents Co. Ltd., Beverley.



4, 'Strongarm' hydraulic door closer.

New Boiler Design

The manufacturers of Tayco boilers are well known both for the efficiency

[continued on page 278]



FOR
BUILDING UP
**DECORATIVE
SCHEMES**
EASILY & EFFECTIVELY

**JOHN LINE
& SONS LTD**
Makers of fine Wallpapers and Paints
213-216 TOTTENHAM COURT
ROAD LONDON W.1



Specs. must be Correct

Correct specification of the painting system is essential if the best treatment is to be followed for the surfaces and conditions involved and to ensure easy, economical maintenance.

BPL PAINTING ADVISORY SERVICE

Paint making is now highly scientific with an ever-increasing range of raw materials for the production of improved coatings. It is important that painting practice should keep pace with these developments. Do not hesitate to make full use of the BPL Painting Advisory Service to assist in deciding the paints most suitable for the project.



BRITISH PAINTS LIMITED

PORTLAND ROAD, NEWCASTLE UPON TYNE, 2.
CREWE HOUSE, CURZON STREET, LONDON, W.1
31, WAPPING, LIVERPOOL.



BELFAST • BIRMINGHAM • BRISTOL • CARDIFF • GLASGOW • LEEDS • MANCHESTER • NORWICH • PLYMOUTH
SHEFFIELD • SOUTHAMPTON • SWANSEA • and all principal towns,

BPL/D.76



*Here are two famous
BPL paints from a
comprehensive range
of fine products
for protection and
decoration.*

'Superlative'
THE BEST GLOSS PAINT
IN THE WORLD
'Superlative'
EGGSHELL FINISH



continued from page 276]

of their boilers and the company's concern for good appearance. This new design is the happy result of a manufacturer engaging the skill of Neville Conder, who worked with the design and production staff at one of the foundries to produce the Tayco 'Thermatic.' The rated output is 25,000 BTUs per hour, the rate of burning is automatically controlled and the design incorporates an enclosed grate 'shaker' of a new



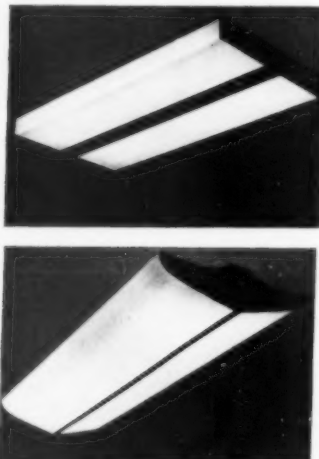
5, Tayco 'Thermatic' boiler.

type, and a deep ashpan. Dimensions are: height 27 in.; overall width at base 20 in.; overall depth at base 17 in. It is claimed that with a 30-gallon hot water cylinder, a towel rail, small radiator, and up to 12 sq. ft. of pipe surface may be heated additionally. The boiler is available in various coloured finishes, and the price is likely to be around £29.

Robert Taylor & Co. (Ironfounders) Ltd., 170 Victoria Street, London, S.W.1.

New Fluorescent Fittings

Two new fluorescent fittings have just been produced by Harris & Sheldon (Electrical) Ltd. The first is a severely rectangular fitting designed



6, semi-flush fluorescent fittings.

for semi-flush mounting on low ceilings. Projection from the ceiling is no more than 3 in. and is made possible by locating the control gear centrally between the tubes. The diffusers are of perspex, and each fitting takes four 5 ft. 80-watt tubes. The overall measurements are 61 in. by 25 in. by 3 in. Fixing centres are at 30 in. by 7 in. and the weight is 68 lb. The price is £41 5s. 0d. The second fitting is a pendant, again taking four 80-watt tubes. Both fittings are available in eighteen British Standard colours at no extra cost. The designer was Robert Tate.

Harris & Sheldon (Electrical) Ltd., 46 Great Marlborough Street, London, W.1.

No Back-Up Wall

One of the great inhibitors of curtain wall development in Britain is, of course, the public authorities' requirement of two hours' fire resistance; which has always meant, in practice, building a sill-height back-up wall behind the curtain. This is costly in itself, and it has the further disadvantage that, if you have a sheer wall, it must be erected from outside the building. Gardiner's 'Muragard' is the first curtain wall in this country to be given a two-hour fire rating. 'Muragard,' which first appeared at the last Building Exhibition (after the AR article 'Walls off the Peg') makes use of precast concrete mullions. The first application of this particular curtain was to an office building fronting Gardiner's own new offices at Broad Plain, Bristol, and was erected from inside the building, without scaffolding.

Gardiner Sons & Co. Ltd., Midland Works, Bristol, 2.

Advice on Colour

'Good Colour'—a bright yellow-covered 16-page brochure presents ICT's Colour Advisory Department. It begins with the confession that Dulux did not sell very well before the war and that to help matters, the firm set up this service. Its first big success came in 1944 at the Mill Lighting and Colour Exhibition in Manchester. The examples of its work, colour printed on following pages—rolling mills, schools, power station, swimming bath—bear out the proud assertion of the preamble that the personnel of the service are not 'highbrow scientists, long-haired artists or precious theorists' but 'ordinary people.' Hence, no doubt the predilection for green and off white.

For this and the Technical Advisory Service a new building has been put up at Slough—departmentalized and fully equipped to answer all manner of queries, give demonstrations and make tests.

ICT, Millbank, S.W.1.

CONTRACTORS etc

Correction: The Belgrade Theatre, Coventry. The copper Coat of Arms at the Belgrade Theatre, Coventry, was made by George Lister & Sons, of Cambridge. The name was inadvertently omitted from the July issue.

Flats at Ham Common, Architects: James Stirling, James Gowen. **General contractors:** Rice & Son.

[continued on page 280]




MAKE SURE YOU SPECIFY

SUNWAY SKYLIGHT BLINDS

Vevo

SUNWAY SKYLIGHT BLINDS in this installation have been cleverly used by the Architects for dummy decorative units and floating ceilings. The special holding device fitted to all Sunway Skylight Blinds provides easy access to the reverse side, the slats simply unclip and spring back into place.

MADE-TO-MEASURE in aluminium alloy and stove enamelled in 20 attractive colours, Sunway Skylight Blinds are flexible, unbreakable, they do not crack, chip or fade and will give a lifetime of trouble-free service with a minimum of maintenance. They can be installed in a fixed or adjustable position—at any angle—so if your problem is concerned with changing heat and light conditions, ventilation, light reflection or artificial lighting effects think of SUNWAY SKYLIGHT BLINDS and get in touch with

** Photographs taken in the premises of Moons Motors, Davies Street, London.*

Architects:
J. M. AUSTIN & SMITH & PARTNERS

Contractors:
HOLLOWAY BROTHERS

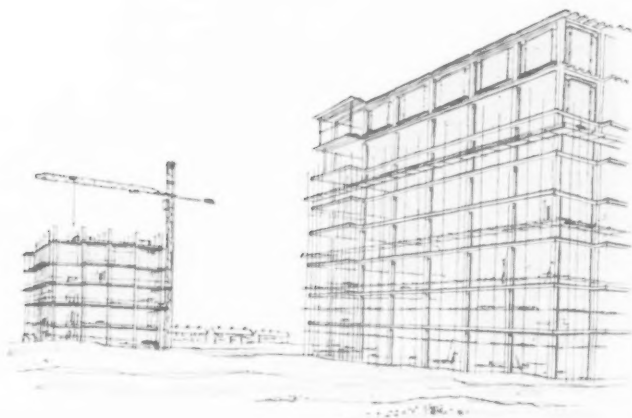
HORSLEY, SMITH & CO. (HAYES) LTD.

(AR) DAWLEY ROAD, HAYES, MIDDLESEX

Sunway Industrial Distributors

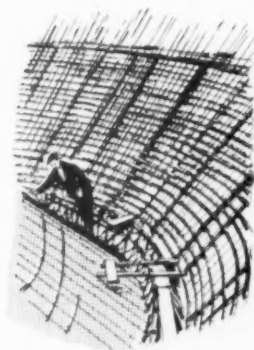
HAYES 2931

Concrete is our business



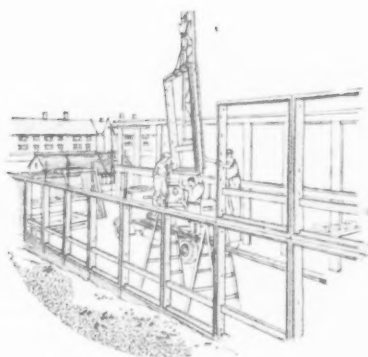
Construction

'Concrete structure by Truscon' means construction by specialists — with the wide experience to pre-plan any kind of concrete work for speed and economy, the modern plant to carry it out, and a reputation for soundness, quality, and fine finish.



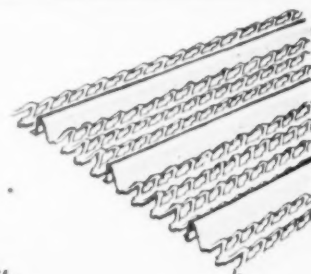
Engineering Design and Supply

Our engineers' progressive, yet practical approach, backed by Truscon's fifty years' experience of structures and techniques, produces the right economic design for the job. Clear detailed drawings and reinforcement delivered ready cut, bent, and labelled, strictly to an agreed programme, simplify site-work.



Precast Floors and Other Products

Precast Division manufactures the two types of Truscon Precast Floor (both officially rated for fire-resistance) in four regional works; also makes frame components, prestressed members, and other precast products to specification. Shown here are assemblies of Truscon Picture Frame and Truscon Type 1 Precast Floor, units.



Hy-Rib

... manufactured by Truscon's Hy-Rib Division in interlocking sheets, provides, by one simple fixing operation, permanent centering, reinforcement, and an ideal plastering surface for concrete floors, roofs, and walls; or alternatively a true, rigid plaster-base for suspended ceilings, partitions, and falsework generally, needing fewer supports. Hy-Rib grips and fortifies so well that a Hy-Rib and gypsum-plaster ceiling has withstood an official four-hour fire test.

Truscon

For fifty years

*The Trussed Concrete Steel Company Limited,
now Truscon Limited
35-41 Lower Marsh, London, S.E.1
Telephone: WATerloo 6922*

continued from page 278]

H.W. radiators: Ideal Boilers & Radiators Ltd. **Soil stack units, manhole covers:** Broad & Co. **Expansion joints:** Expandite Ltd. **Copper fittings:** Yorkshire Imperial Metals Ltd. **Doors:** Magnet Joinery Ltd. **Plasters:** British Plaster Board Co. **Asbestos roofs:** Roberts Adlard & Co. **Kimola board:** Cellacite & British Uraltite Ltd. **Damp proof courses:** Ruberoid Co. **Wood seal:** Floor Treatments Ltd. **Steel reinforcement and structural design:** Expanded Metal Co. **London stocks:** Eastwoods Ltd. **Quarry tiles:** W. H. Wheatley & Co. **Fletton bricks:** London Brick Co. **Paints:** I.C.I. Ltd. **Distemper:** Walspamur Co. **TV aerial installation:** Antiference Installations Ltd. **Ironmongery:** Alf. G. Roberts & Co. **Curtain tracks:** Silent-Gliss Ltd. **Reflective roofing:** Prater Asphalt Co. **Sanitary fittings:** John Bolding & Son. **Metal balustrades:** Haskins Ltd. **Acetate floors:** Armstrong Cork Ltd. **Insulating screed:** Cheecol Processes Ltd.

Interiors: Offices for Air France, Bond Street, W.1. Architect: Charlotte Perriand. **Consulting architect:** Peter Braddock. **General contractors:** Harris & Sheldon Ltd. **Sub-contractors:** Building work and plasterwork to North wall, reinforced construction of domes and brick and stone paving: H. Bartlett (Builder). **Acoustic plasterwork to suspended ceiling, fibrous plaster lighting cover and troughs:** H. & F. Badcock Ltd. **Metal furring to suspended ceiling:** Universal Metal Furring & Lathing Co. **Heating panels in ceiling, tubular heaters and ventilation fans:** Thames Bank Iron Co. **Electrical work:** Harris & Sheldon (Electrical) Ltd. **Glasswork (supplied from Paris):** Glaces de Boussois. **Metalwork to glazing and metal**

entrance door-frames: M. D. Guidotti. **Glazing work and plate glass windows:** James Clark & Eaton Ltd. **Plastic sliding doors to fittings and cellular partition:** M. Steph-Simon. **Movable belts to European counter:** Lamson Engineering Co. **Photo murals:** Studio-Astron; Autotype Ltd. **Carpeting:** Hampton Contracts Ltd. **Filing cabinets and pedestals:** Roneo Ltd. **Lockers:** Sankey-Sheldon Ltd. **Lascia lettering:** Lundsigs Ltd. **Plastic coverings:** Formica Ltd. **Flag-poles and flags:** Piggot Bros. & Co. **Internal telephone system, external telephones:** Communication Systems Ltd.

Interiors: Offices for Air India, Bond Street, W.1. Architects: Alexander Gibson and Philip Lucey of Design Research Unit. **General contractors:** F. W. Clifford Ltd. **Sub-contractors:** Decorative glass: London Sand Blast Decorative Works Ltd. **Light fittings:** Oswald Hollman Ltd.; Merchant Adventurers Ltd.; Courtney Pope Ltd. **Conveyor belt:** Lamson Engineering Co. **Signs:** Pearce Signs Ltd. **Chairs and settee:** Hille of London Ltd. **Carpet:** The Carpet Manufacturing Co.

School at West Derby, Liverpool. Architects: Harold E. Davies & Son in collaboration with the Liverpool City Architect. **General contractors:** R. J. Barton & Sons. **Reinforced concrete and precast units:** Trussed Concrete Steel Co. **Metal windows, patent glazing, metal W.C. partitions:** Henry Hope & Sons Ltd. **Roof coverings:** William Briggs & Sons. **Glazing:** Williams & Watson. **Rustic facing bricks:** Ravenhead Brick Co. **Dinorwic grey concrete bricks:** James E. Beard & Co. **Concrete paving flags:** Liverpool Artificial Stone Co. **Roads and playgrounds:** George Wright Ltd.

Main entrance gates and railings: George Lowe & Sons. **Concrete bollards:** Masoncrete Ltd. **Heating installation:** Engineering Service Installation Ltd. **Electrical installation:** Winstanley & Barnett. **Thermoplastic and P.V.C. flooring:** Limmer & Trinidad Lake Asphalt Ltd. **Hardwood flooring:** Dixon Bros. Ltd. **Terrazzo flooring:** The Carrara Marble Co. **Sanitary fittings:** Perrin Hughes & Co. **Ironmongery:** Campbell & Mabbs. **Sliding partitions:** Esavian Ltd. **Roller shutters:** Thornborough & Son. **Perspec domelights:** William Freer Ltd. **Paints:** Keystone Ltd. **Wallpapers:** William Park. **Stage lighting equipment:** Strand Electric & Engineering Co. **Ventilating fans:** Brookes Ventilation Units Ltd. **Emergency lighting and fire alarm:** Pritchett & Gold & E.P.S. Co. **Lightning conductor:** Brunswick Restoration Co. **Laboratory fittings:** E. Taylor & Co. **Laboratory tables:** R. A. Stringer & Co. **Fulcrathene wastes:** J. S. & F. Folkard Ltd. **Cloakroom equipment:** Peakes (1932) Ltd. **Wire mesh lockers:** Brookes & Co. (1925) Ltd. **Assembly hall curtains:** G.B.-Kalec Ltd. **Lettering:** Drakard & Humble Ltd. **Roller chalk-boards:** Wilson & Garden Ltd. **Blackout and sun blinds:** Hurst & Ward. **Electric light fittings:** Merchant Adventurers Ltd.; G.E.C. Ltd.; Falk Stadelmann & Co.

Offices in Monmouthshire. Architect: Frank Scarlett. **General contractors:** Hinkins & Frewin Ltd. **Solid floors:** Pierhead Ltd. **Metal windows:** Williams & Williams Ltd. **Canopy:** Wainwright & Waring Ltd. **Balustrade and railing:** Gardiner, Sons & Co. **Door furniture:** Walker & Wood Ltd. **Lift:** Hammond & Champness Ltd. **Marble:** J. White-

head & Sons. **Partitions:** Compactum Ltd. **Sanitary fittings:** Adamasz Ltd.; W. H. Knowles. **Floor finishes:** Armstrong Cork Co. **Rendering:** Mineralite Ltd. **Special furnishing:** Ian Henderson Ltd. **Laboratory fittings:** North of England School Furnishing Co. **Kitchen equipment:** Benham & Son. **Heating, ventilating and electrical installation:** G. E. Taylor & Co. **Mosaic:** Zanelli Ltd.; Marriott & Price Ltd. **Foundation:** Le Grand, Sutcliffe & Gell Ltd.

House at Strawberry Hill. Architect: Kenneth Wood. **General contractor:** J. Clayton. **Warm-air heating:** Radiation Ltd. (Warm Air Division). **Roofing:** London Asphalt Co. **Joinery:** Humphreys Ltd. **Bricks:** Ryarsh Brick & Sand Co. **Paints:** Smith & Walton Ltd. **Timber sealers:** Floor Treatments Ltd. **Ironmongery:** Alfred G. Roberts Ltd. **Sanitary fittings:** Shanks & Co. **Bibs, etc.:** Barking Brassware Co.

Architects' Office at Lewes. Architects: Chilton, Waters & Stutchbury. **Troflek roofing:** H. Newsum & Sons. **Roofing build-up:** James Chandler (Lewes) Ltd. **Electrical installation:** Guest Electrical Ltd. **Floor coverings:** Revertex Ltd.

Advertisement

Donald P. Shearer, B.Eng., Assoc. Eng., for many years engineer to Radiation Ltd., has now set up a personal Consultancy Service for factory surveys, layouts, time study and production methods. Advice in the field of vitreous enamelling and foundry mechanisation. He also deals with works photography and confidential document copying. 174 Walsall Road, Sutton Coldfield, Warwickshire. Phone Streetly 7298.

the foundation of stability

West's Shell Pile consists of a precast reinforced concrete sectional outer shell which is driven to a calculated 'set' in the load-bearing stratum, and a reinforced concrete core, cast in-situ after driving is complete. The firmness and consolidating effect of the positively driven pile are therefore retained, the final 'set' is undisturbed — but there is no fatigue in the pile core. These are the main factors which ensure stable foundations for many different structures, particularly those imposing great weight per unit of area occupied.



PLEASE WRITE FOR OUR LATEST PUBLICATIONS

WEST'S SHELL PILING SYSTEM

WEST'S PILING & CONSTRUCTION CO. LTD

Foundation Specialists . Design & Construction in Reinforced Concrete

BATH ROAD, HARMONDSWORTH, MIDDXX. TEL: SKYPORT 5222

Branches: London . Bristol . Birmingham . Manchester . Glasgow
Australasia: West's Shell Piling (Asia) Pty Ltd, Melbourne & Sydney
Southern Africa: The Roberts Construction Co. Ltd, Johannesburg
France: Compagnie Générale de Construction de Fours, Paris
Ireland: Farrans Limited, Dunmurry, Belfast

A3



Q-stak chair

Suitable for all projects requiring a robust inexpensive stacking chair. Tubular steel legs. Strong moulded ply back and seat veneered beech, cherry or walnut or surfaced with plastic. A version with timber legs (QW-stak) is also available.

Q-stak table

Strong tubular steel frame 4' x 2' top surfaced in either plastic, or cherry or walnut veneer.



Hillestak chair

The new-version of this well-known chair has greatly increased strength. Backs and seats beech, Nigerian cherry, walnut or mahogany. Also upholstered.



Hillestak table

A strong well-finished all-timber stacking table. Frame of beech. Top veneered Nigerian cherry, walnut, mahogany or surfaced with plastic.

Enquiries to showrooms:
Hille of London Ltd. 39-40 Albemarle St. London W1
24 Albert Street, Birmingham 4

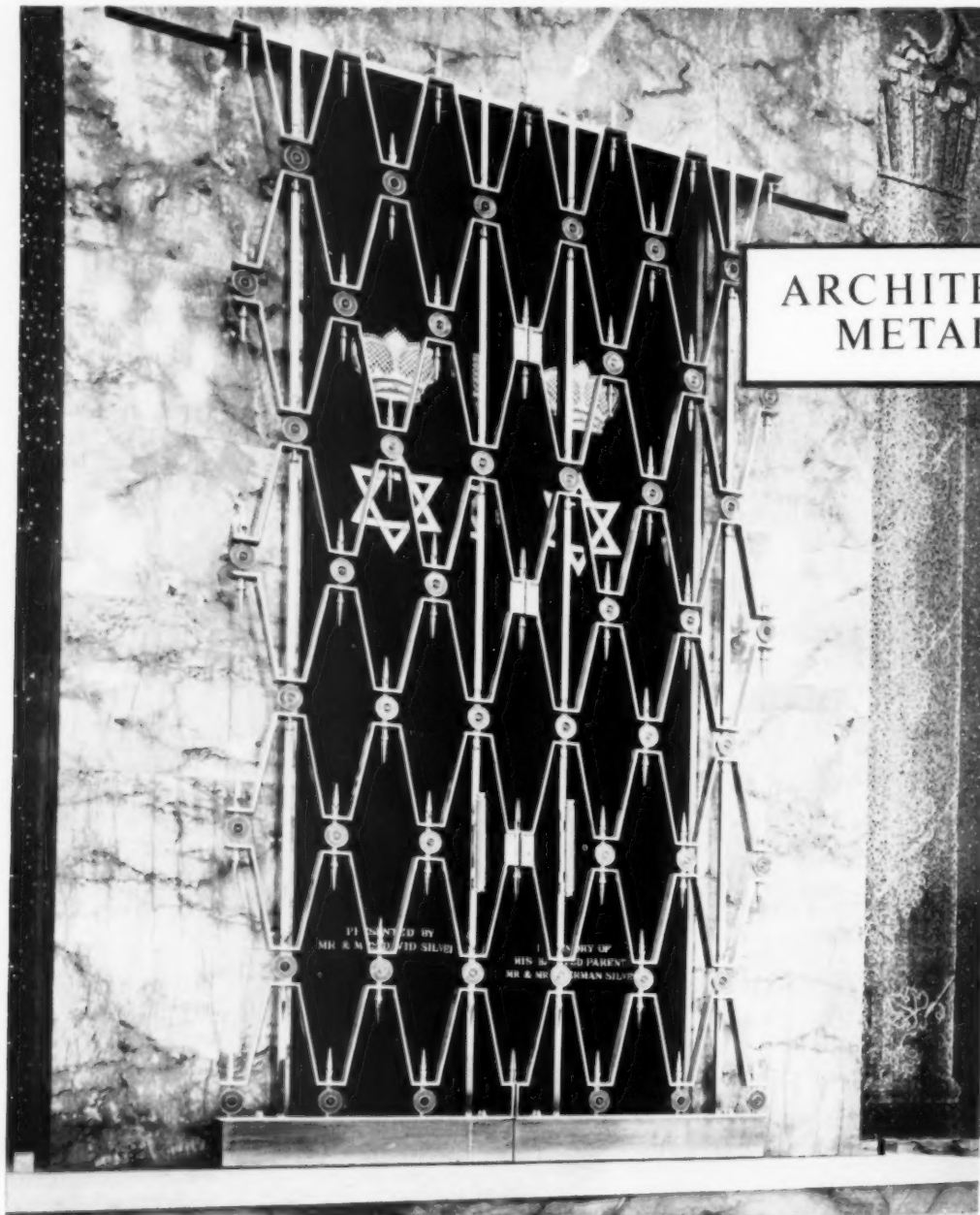
Hyde Park 9576
Midland 7378/9

hille contract division



**"You
should bank
with the
Westminster
too!"**

WESTMINSTER BANK LIMITED, HEAD OFFICE: 41, LOTHBURY, LONDON, E.C.2
and 1,200 branches throughout England and Wales



ARCHITECTURAL
METALWORK



by

BRENT METAL WORKS

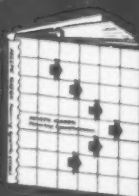
A SUBSIDIARY COMPANY OF

HICKMAN
LIMITED

NORTH CIRCULAR ROAD · LONDON · N.W.2

GLADSTONE 6262

of
course
mason's
add
something
extra
to
their
paint



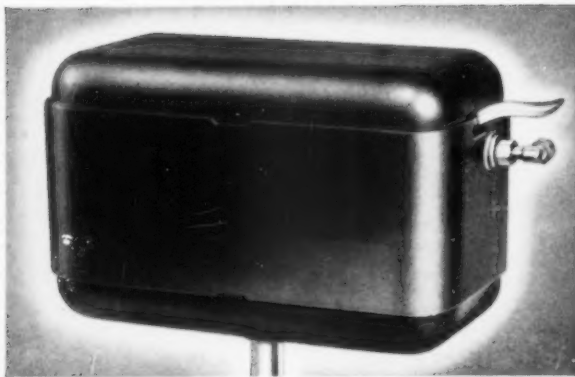
Practising architects
are invited to
write for this helpful
book—"Joseph Mason
Painting Specifications"

However good
the paint, quality alone
is not enough.
That "extra something"
is the expert co-operation
of our Technical Team
to ensure correct planning
and application.
The colour choice in
Masopar includes the full
B.S.S.2660 range.

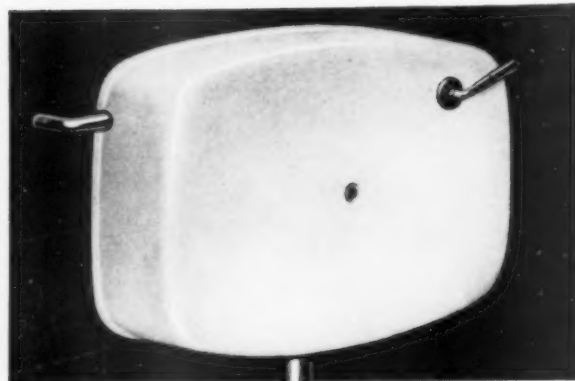
joseph mason paints

JOSEPH MASON AND COMPANY LIMITED, DERBY. TELEPHONE: 40691-2-3.

MANUFACTURERS OF VERY GOOD PAINTS SINCE 1800.



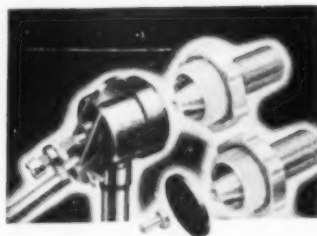
The new Fordham "Raven" in Black Plastic.



Fordham Panel Model "O". Projects only 6 ins. from the wall.

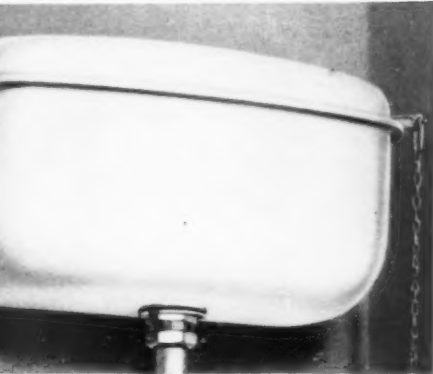


Fordham Polythene Ball Float.



The Fordham All-Polythene Syphon.

Fordham "Acquasave" long-life, non-stick, trouble-free Ball Valves in hard Polythene, will be exhibited at the Conference and Exhibition held in conjunction with the National Housing and Town Planning Council during October.



Fordham "Cleanline" high level cistern.

Look to Fordham for leadership in the design and development of Sanitary Equipment. The new range of Fordham "Cleanline" Cisterns—accepted by the Council of Industrial Design for "Design Review"—are the most handsome and least expensive cisterns obtainable today. In White or coloured vitreous finishes to match any scheme of decoration, they are available in Ivory, Primrose or Green at the cost of White. The recent addition

to the Fordham range is the "Raven" in Black Plastic—superbly efficient, beautifully finished, and at an unrivalled low price. All models are fitted as standard with the incorrodible Fordham All Polythene Syphon and Ball Float and are available with the revolutionary new "Acquasave" non-stick toughened plastic ball valve. Illustrated literature will be sent on request.

FORDHAM PRESSINGS LIMITED

HEAD OFFICE & WORKS: DUDLEY ROAD, WOLVERHAMPTON
Other Factories at Earlsfield (London), Hinckley (Leics), Sedgley (Staffs).

TELEPHONE: 23861/2

DRI-SIL silicone masonry treatments

- * Keep buildings dry
- * Prevent damp and deterioration caused by weathering
- * Keep buildings clean
- * Prevent staining and streaking
- * Do not block the pores of building materials, thus do not inhibit "breathing"
- * Maintain thermal insulation of buildings by preventing the absorption of moisture by the walls
- * Are effective for many years, thus reducing maintenance costs
- * Are easy to apply by brush or spray

For new buildings



OFFICES OF DOCK LABOUR BOARD
by courtesy of Frederick Gibberd

For old buildings



ALL SAINTS' CHURCH, HASTINGS
by courtesy of the Rector and consultant Architect

**Proof of the
effectiveness of
these treatments
is shown in
this table**

		% Water absorption after 24 hours immersion	
		Initial test	Retested after 3 years' natural weathering
Sandstone	untreated	7.0	6.2
	DRI-SIL treated	0.1	0.2
Cement Block	untreated	6.0	5.9
	DRI-SIL treated	0.4	0.7
Common Brick	untreated	20.0	20.1
	DRI-SIL treated	0.1	0.3

All over the country DRI-SIL treatments
have been used on many buildings, large and small, old and new.
Use a DRI-SIL silicone to guarantee the quality

These firms supply water-repellent masonry treatments based on DRI-SIL silicones

Allweather Paints Ltd, London, WC2
Atlas Preservative Co Ltd, Erith
Isaac Bentley & Co Ltd, Manchester
Lewis Berger (Gt. Britain) Ltd, London, E9
Bitulac Ltd, Newcastle-upon-Tyne
S. Bowley & Son Ltd, London, SW11
British Paints Ltd, Newcastle-upon-Tyne
Byrom Paint & Varnish Co Ltd,
Stockport
Chemical Building Products Ltd
(Dept DSI) Hemel Hempstead
Clutha Paint & Oil Co Ltd, Glasgow
Samuel Courtney Ltd, Belfast
John S. Craig & Co Ltd, Glasgow
W. David & Son Ltd, London, N1
Detel Products Ltd, South Ruislip
Stuart B. Dickens Ltd, London, SW1
Duresco Products Ltd, London, SE7
W. C. Evans & Co (Eccles) Ltd,
Manchester
Evode Ltd, Stafford
T. & W. Farniloe Ltd, London, SW1
Farrow & Ball Ltd, Verwood, Dorset
Floorlife & Chemicals Ltd, Manchester
Joseph Freeman Sons & Co Ltd,
London, SW18
Grangersol Ltd, Watford
John Hall & Sons (Bristol & London) Ltd,
Bristol
Hangers Paints Ltd, Hull
E. Hardman & Son Co Ltd, Hull
Harvey Langford Ltd, London, W1
W. W. Hill Son & Wallace Ltd, Salford
Hydrol Ltd, London, W3
Indestructible Paint Co Ltd, London, W1
Irish Cold Bitumen Ltd, Belfast
Leyland Paint & Varnish Co Ltd, Leyland
George Lillington & Co Ltd, Mitcham
John Line & Sons Ltd, London, W1
Donald Macpherson Ltd, Manchester
John Mathews & Co Ltd, Liverpool
Mineralite Ltd, Croydon
Montgomerie Stobo & Co (Chester) Ltd,
Saltney
Nubold Development Ltd, Crawley
Permoglaze Ltd, Birmingham
Purimachos Ltd, Bristol 2
Reynolds Paint & Varnish Ltd, Liverpool
Ribble Paints & Varnishes Ltd,
Blackburn
Ripolin Ltd, Southall
Sealocrete Products Ltd, London, NW10
Silicaseal Ltd, Newcastle-upon-Tyne
William Sim & Sons (Paints) Ltd,
Edinburgh
Stephenson & Co, Blackpool
Thornley & Knight Ltd, Birmingham
Turner, King & Shephard Ltd, London, E15
Walpamur Co Ltd, Darwen
Wareing Bros. & Co Ltd, Bolton
F. A. Winterburn Ltd, Leeds

Architects and Paint Manufacturers are invited to write for full information and details of extensive tests of DRI-SIL carried out in this country and in the USA. DRI-SIL is a registered trade mark of Midland Silicones Ltd.

MIDLAND SILICONES LTD

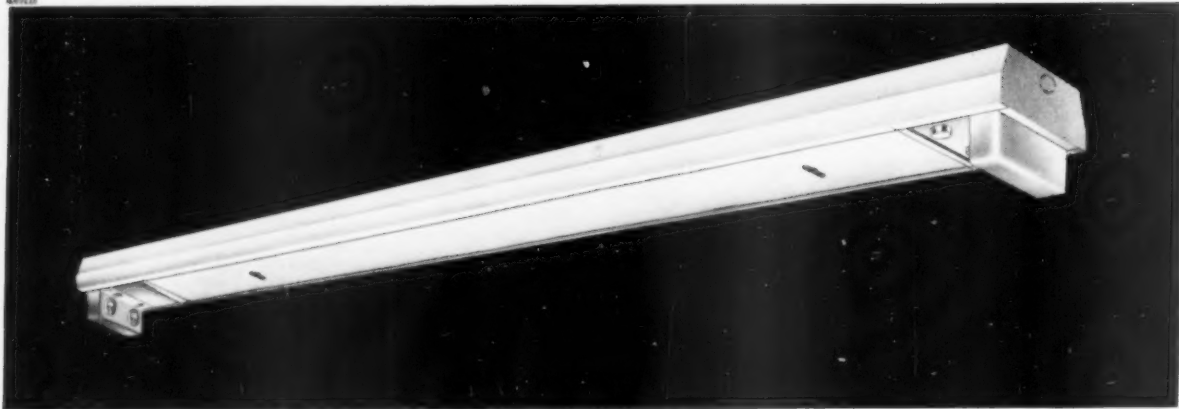
Associated with Albright & Wilson Ltd
and Dow Corning Corporation

first in British Silicones

19 UPPER BROOK STREET · LONDON · W1
Telephone: Grosvenor 4551

TOW/MS 122

Announcing * The Revolutionary **EKCO**



Over 200 fluorescent fittings from this Basic Spine
4 ft., 5 ft. and 8 ft.—Single & Twin Tubes

An entirely new range of Fluorescent Lighting Fittings, produced by experts with many years of experience, to combat the ever-rising costs of installation and maintenance.

The **Essex Range** prices are very competitive with those of any fittings of the same standard, but only the **Essex Range** has all the precision built-in refinements such as:—

Detachable control gear tray, quick-fix reflectors and diffusers, heavy duty bi-pin lampholders permitting lamping from one position, no projecting screwheads on spine, and many others.

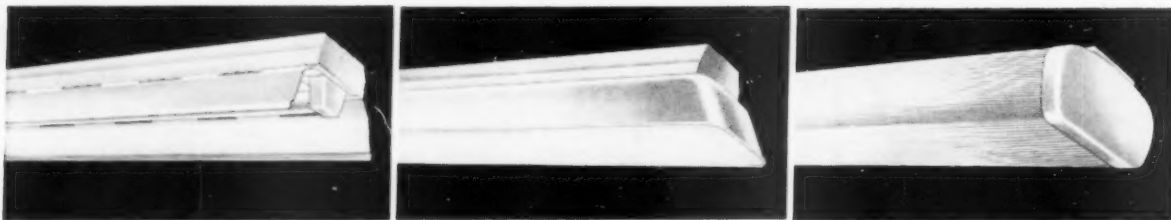
Ask for a copy of the Ekco **Essex Range** Catalogue and see how good fluorescent lighting fittings can be.

* *Installation and maintenance cost halved.*

* *Assembly by one man in two minutes.*

* *Full range of quick-fix metal and plastic reflectors with open or closed ends.*

* *Modern diffusers with coloured end-plates—quickly detachable for ease of maintenance.*



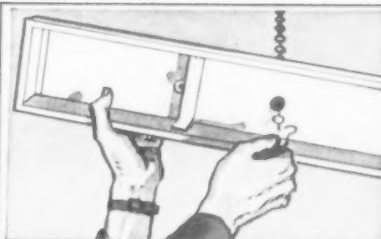
EKCO-ENSIGN ELECTRIC LIMITED

SALES OFFICES, ILLUMINATING ENGINEERING DEPTS., SHOWROOMS AND DEPOTS IN

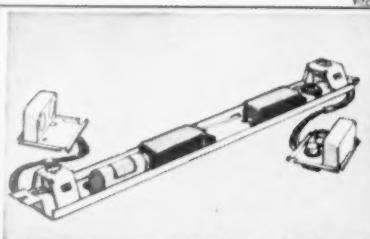
Essex Range

PATENT APPLIED FOR

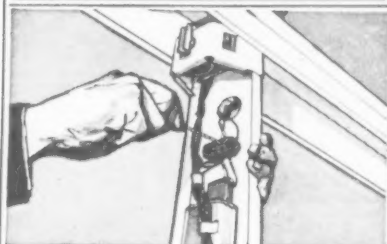
INSTALLATION & Maintenance A ONE-MAN JOB!



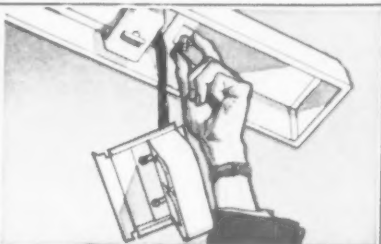
1 First the empty spine is easily fixed to conduit, chain, universal suspension or ceiling. The 5ft. spine weighs only 7 lbs.



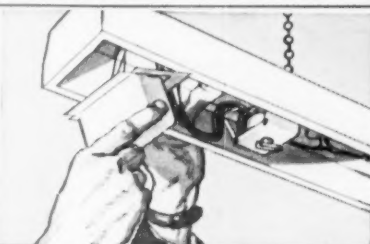
2 The control gear tray is already wired complete with lampholder assemblies. The Switchstart tray for a single tube 80W. fitting weighs only 9 lbs.



3 Gear tray is hooked into spine and hangs vertically leaving both hands free to make connections.



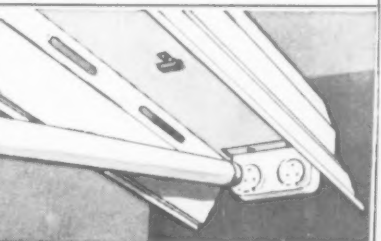
4 The gear tray is now swung up and fixed securely in position by means of the captive wing nut.



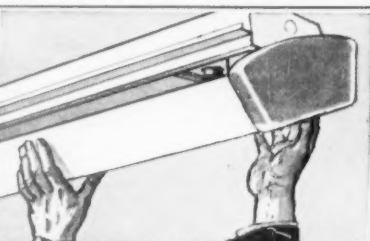
5 The lampholder assemblies are engaged into the ends of the spine and slid into position. No screws or tools are required.



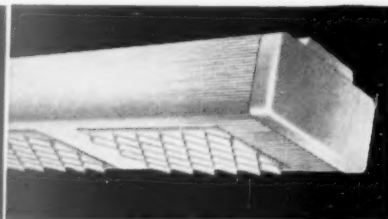
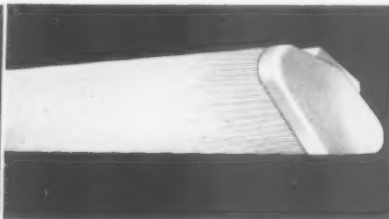
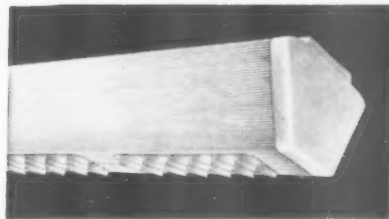
6 Reflectors (or coverplates) are instantly attached to the spine by two quick-fix turn-buttons.



7 Easy tube insertion from one end of the fitting. The fitting is now ready for use.



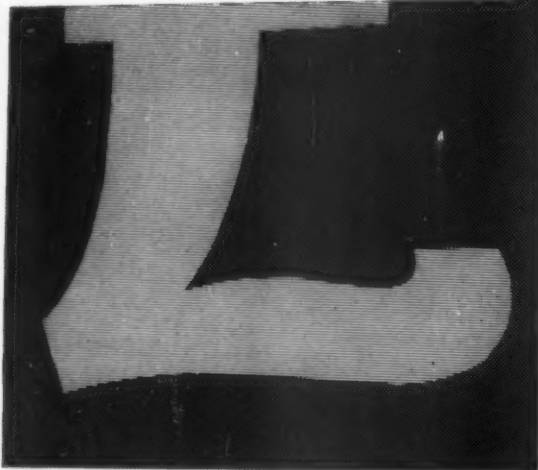
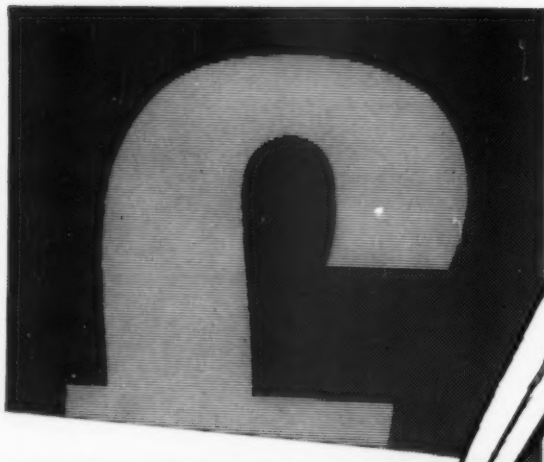
8 This illustration shows the easy method of diffuser attachment. A projecting coverplate is used, the diffuser is hung on to one side, is swung up and similarly engaged on the other side.



45 ESSEX STREET, STRAND, LONDON, W.C.2. TEL: CITY 8951

LONDON · MANCHESTER · BIRMINGHAM · NOTTINGHAM · GLASGOW · CARDIFF

EL59

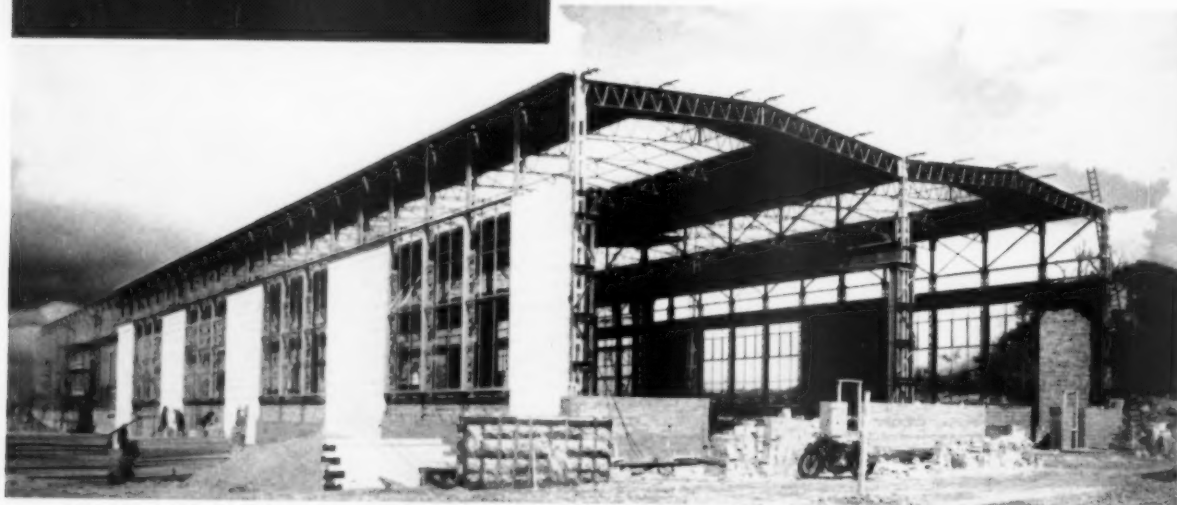


CUT
COSTS

by using
**HILLS
DRY BUILDING
TECHNIQUE**

A system that has been used extensively for
*INDUSTRIAL BUILDINGS, OFFICES,
HOSPITALS, HOSTELS, SCHOOLS, ETC.

*Will satisfy requirements of Thermal Insulation (Industrial Buildings)
Act 1957.



HILLS (WEST BROMWICH)
LIMITED

Products include: Presweld steel frames, glass
curtain walling, double glazed units, windows and
patent glazing, ventilating equipment, etc., etc.

ALBION ROAD, WEST BROMWICH, STAFFS. Telephone: WEST BROMWICH 1811 (15 lines)
BRANCHES AT LONDON, MANCHESTER, BRISTOL, NEWCASTLE-ON-TYNE AND GLASGOW

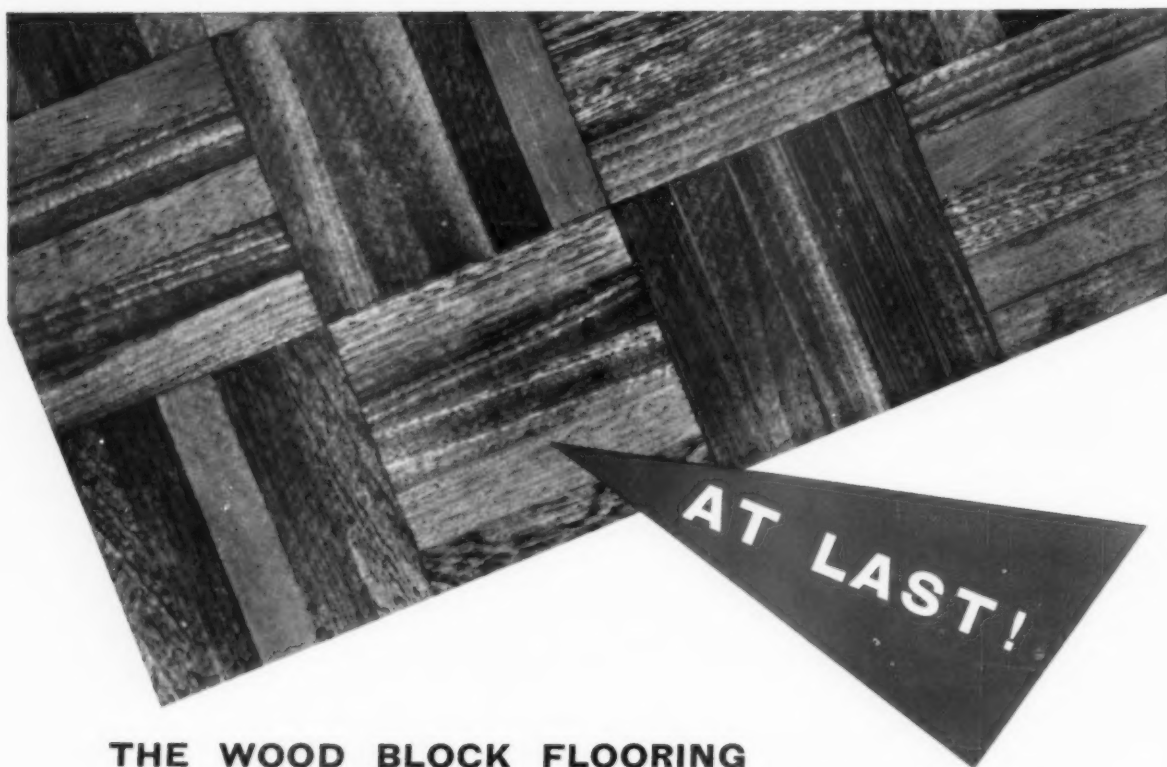
Shanks



Design Registration applied for

ENMORE
IN VITREOUS CHINA

SHANKS & CO., LTD., TUBAL WORKS, BARRHEAD, SCOTLAND



**THE WOOD BLOCK FLOORING
YOU WANT AT THE PRICE YOU CAN AFFORD**

Alufloor

British Patent No. 746791

LUXURY FLOORING AT A UTILITY PRICE

A revolutionary technique has made possible the manufacture of quality wood block flooring at an extremely economical price.

Alufloor is a prefabricated parquet, made in 18 in. square panels each of 80 hardwood fingers $\frac{3}{8}$ in. thick. Each individual panel is precision manufactured to the finest 'tolerance', *unmatched by any other process*, giving an exceptionally tight finish without joints. In addition, *Alufloor* is sanded to the finest finish and is virtually two-thirds laid before it leaves the factory. Pinning and experimental positioning are eliminated and a quieter, more flexible and stable surface provided with the same wearing life as a 1 in. nominal wood floor—yet at much less cost.

Alufloor is already extensively used in offices, stores, schools, hospitals, etc. and enables architects to specify wood block flooring without raising contract estimates unduly.

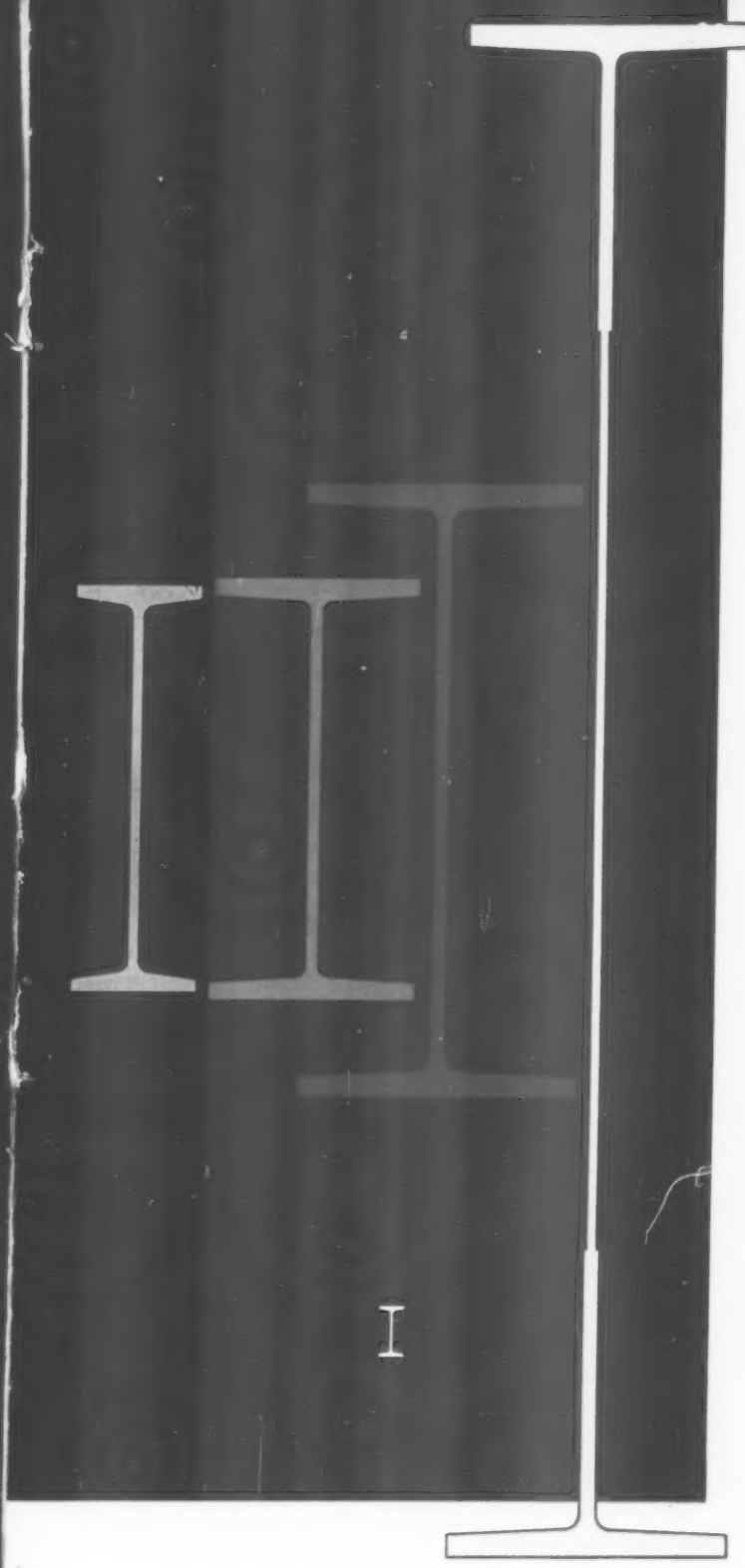
ALUFLOOR CAN BE PRODUCED FROM ANY HARDWOODS TO ARCHITECT'S SPECIFICATION

Write today for fully informative illustrated booklet to:-

CALDERS LTD.

Plough Way, Rotherhithe, London, S.E.16 Tel: BERmondsey 3535

Biddick Lane, Washington, Co. Durham Tel: Washington 2321



Extending the range of simplification

The new Dorman Long Universal Beam Mill is rolling beams having several times the load-carrying capacity of any previously rolled in this country: these are suitable for bridge spans or heavily loaded buildings without the need for additional flange reinforcement.

A great deal of plating and compounding of girders is thereby eliminated.

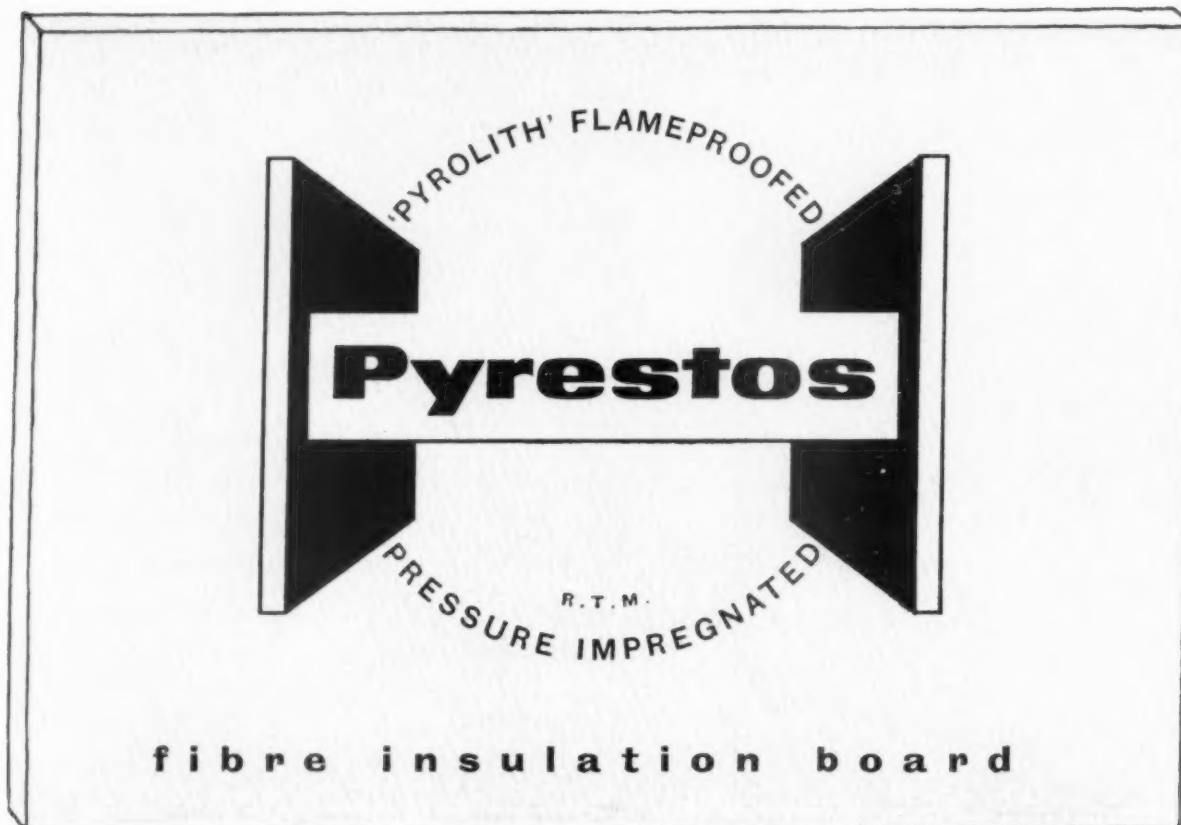
The range of simplification is still further extended by the availability of heavy Tee-sections cut from the large universal beams. Two such Tees, with a web-plate welded in, provide a deep plate girder of great load capacity.

The yellow section shows this construction; in red is the 36" by 16½" universal beam, in blue the 24" by 12", previously the largest rolled in this country, now available in three weights, and in grey is shown the largest of the B.S. sections, 24" by 7½". By way of contrast the little white section is the B.S. 3" by 1½", the smallest I section rolled by us.

DORMAN LONG

Flameproofed

throughout under pressure

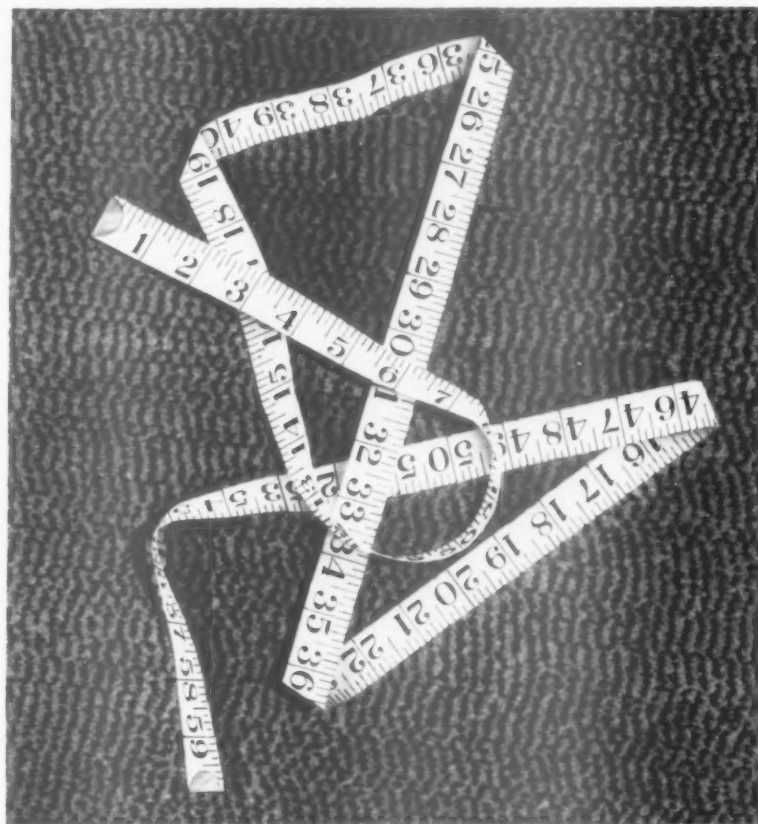


Factory insulation with fire-safety—by 'Pyrestos'. Cutting, grooving and bevelling do not reduce its flameproof qualities. The fire retardant chemicals are an integral part of the board, they are effective throughout its thickness, whilst leaving the thermal efficiency of the board unchanged. 'Pyrestos' is proofed against fungal decays, insect grubs and termites, and has been officially shown to conform to Class 1, BS 476—with no flamespread whatsoever.

Specify 'Pyrestos' now for use in January, 1959, when new production plants will be fully operative. Limited output is available for current work.

Class 1—without a flicker of flame or a shadow of doubt

Pyrestos
LIMITED



**Your carpet—tailor made to the nearest inch
Any length and up to 33 ft. wide**

**TEMPLETON
STATE
BROADLOOM**

8 COLOURS 5 qualities: Maine, Oregon, Nevada,
Florida & Kansas

Here is a carpet many an architect must have dreamed of—in form and colour thoroughly contemporary—in construction suitable for a wide variety of purposes—in dimensions the most adaptable carpet which is made anywhere to-day. And in price it is most economical because it is tailor made to your measurements and you only pay for the size you order. Here are the facts:

*Any length and any width up to 33ft wide without seams.
Five qualities—Maine, Oregon, Nevada, Florida and Kansas.
Eight colourings—Red, Charcoal, Green, Lime, Blue, Camel, Cedar and Grey.
Quick delivery from material ready to be woven to your exact measurements.*

**JAMES TEMPLETON & CO LTD GLASGOW
LONDON MANCHESTER LEEDS**

THE UNIVERSITY OF LEEDS-DEPARTMENT OF TEXTILE INDUSTRIES
Architect: Messrs. Lanchester and Lodge, London
Consultants: Messrs. Oscar Faber & Partners, London



Mellor Bromley

HEATING, VENTILATING AND AIR CONDITIONING ENGINEERS AND CONTRACTORS

MELLOR BROMLEY (AIR CONDITIONING) LTD.
BARKBY ROAD, LEICESTER
(Member of the Bentley Group)
(Telephone: Leicester 66651)



WOOL INDUSTRIES
RESEARCH ASSOCIATION, TORRINGTON, LEEDS
Consultants: Messrs. Rosser & Russell, Leeds

AC 40

AN ASSOCIATION OF ARTIST CRAFTSMEN

MAKERS OF PRINTING BLOCKS IN LINE

HALFTONE AND COLOUR
ARTISTS · PHOTOGRAPHERS



THE ENGRAVERS GUILD LTD

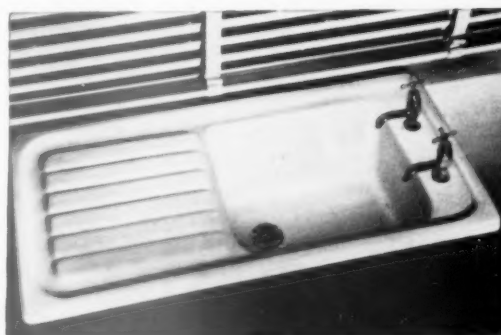
WINDSOR HOUSE · CURSITOR STREET · LONDON · E.C.4

Now! The latest and best in kitchen fittings—



Sink and drainer kitchen fitting made by Arnoplast Ltd., from 'Perspex' acrylic sheet.

'Perspex' sinks and drainers



HERE is the sink and drainer unit for the modern housewife. It is made from 'Perspex' acrylic sheet, the modern, *colourful* material that will not chip or rust.

'Perspex' is easy to clean, smooth and durable. It is a light material which offers considerable scope to the

imaginative designer. It is available in a wide range of fashionable colours. Kitchens are brighter, gay, with fittings made from 'Perspex'.

This sink and drainer unit, because it is made from 'Perspex', can be sold at a price everyone can afford.

· PERSPEX ·

'Perspex' is the registered trade mark for the acrylic sheet manufactured by I.C.I.

IMPERIAL CHEMICAL INDUSTRIES LIMITED • LONDON • S.W.1



P.679

**"IT'S LIKE
THIS SIR"**



**Architects
listen to men
on the job -**

"Beadfix positively prevents leaking glazing by its elastic nature, because it was designed for that very job of adhesion under expansion. It gives with the frame. That is why "Beadfix" is admirable for glazing curtain wall type frames or for fixing double glazed units."

"The manufacturers have said it will weather for twenty years or more without having paint protection. Why not contact the manufacturers? I'm told they like to take a friendly interest in specification work by supplying details on glazing procedure."



**THE
ELASTIC
MASTIC**

BEADFIX

**Manufactured by:—
STORRY WITTY & CO. LTD., BEVERLEY, YORKS.
Telephone: Beverley 81201/2 Telegrams: "Stority, Beverley"**

SADDS

high grade

FLUSH DOORS

and

KITCHEN UNITS

were chosen



Photo by courtesy of the Contractors

For the new block of flats and maisonettes in Royal Street, Lambeth, London, S.E.1., Sadds supplied 800 high grade flush doors and 250 kitchen units.

Contractors: Wates Limited

Consulting Architect: L. G. Creed, F.R.I.B.A., A.M.T.P.I.

Consulting Engineer: Felix S. Samuely, B.Sc.(Eng) Lond., M.I.C.E., M.I.Struct.E., F.I.A.S., M.I.W., M.Cons.E.

JOHN SADD & SONS LTD

JOINERY MANUFACTURERS

WHARF FD.5., MALDON, ESSEX Maldon 131

*London Office:
Bank Chambers, 329 High Holborn, W.C.1
Chancery 7214*

Main contractors to
AIR-INDIA INTERNATIONAL
for shopfront and interior work
described in this issue



**INTERIOR FITTING
and DECORATIONS**

by

FRANK W. CLIFFORD LTD.

29, Vauxhall Bridge Road, S.W.1.

Tel. — VICTORIA 5385

JOINERY • FIBROUS PLASTER • METALWORK • PAINTING & DECORATIONS



*We are landing a rapidly increasing number of
important contracts.*

Also our customers keep coming back for more.

This is no accident—we make good furniture.

*We have added a bewildering
number of variations to our
deep upholstered seating.
These chairs illustrated are new
designs. Scaled-up from our
smaller chairs, they can
hold their own in an interior
of any size.
Superbly comfortable, of course.*

**Stafford
Furniture Ltd**
7 Sedley Place
Woodstock Street
London W1
Mayfair 7153

Write for our illustrated brochure, or call and see us.
Also on show are exclusive printed fabrics, tiles.

PLAND REG. TRADE MARK **stainless steel**
sinks for industry



The illustration shows a special unit recently made for use in a research laboratory.

For many years we have been making special sink and sterilizer units of all shapes and sizes for industrial uses. The non-corrosive, hard wearing and hygienic properties of stainless steel make it ideal for use in photographic depts., laboratories and canteens, etc.

THE STAINLESS STEEL SINK CO. LTD

Head Office: RING ROAD, LOWER WORTLEY, LEEDS, 12. Tel.: 638711/2/3

London Office: 14, GREAT PETER STREET, WESTMINSTER, LONDON, S.W.1. Tel.: Abbey 1575

**A
PLEASING FACE
ON AN
'ENGINEERING' BODY**

Unrivalled for all load-bearing purposes.
Sandfaced Facings, one of the famous range of

**ACCRINGTON "NORI"
BRICKS**

SAMPLES ON REQUEST

THE ACCRINGTON BRICK & TILE CO. LTD., ACCRINGTON, LANCs. 'PHONE: ACCRINGTON 2684

Southern Representative: L. G. Rogers, Oak Lea, Main Road, Westerham Hill, Kent.

Telephone No.: Biggin Hill 0538



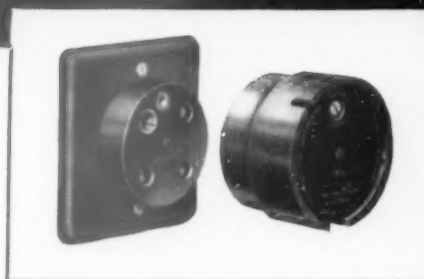
Industrial Plugs and Sockets

figure in
PLAYTEX
production

*Photographs courtesy of
Messrs. Playtex, Port Glasgow.*



D.S. PLUGS LTD



The graceful young lady wearing a 'PLAYTEX Living Bra' is well known to women throughout the world; in North America this unique product has long been a favourite and now, by enlarging their production facilities, the International Latex Corporation has made it available to many other fashion and figure conscious countries.

The 'PLAYTEX' factory at Port Glasgow supplies Great Britain and many overseas areas—a commitment which demands continuous flow line production. That is why, in the Sewing Department handling foundations and babywear, the power take-off to each of up to 200 sewing machines is entrusted to D.S. industrial type plugs and sockets to ensure a power supply that is continuous, safe and convenient.

Head Office: **ATHERTON WORKS, BLACKPOOL ROAD, PRESTON LANCASHIRE.** Tel: Preston 86785 (6 lines)

Works: **SALTERBECK, Nr. WORKINGTON, CUMBERLAND.** Tel: Harrington 345 6

also at **LONDON, BIRMINGHAM and GLASGOW**

**OVER
HALF A MILLION
SQUARE YARDS
OF FLOORING LAID
IN THE U.K.**

INCLUDING LARGE CONTRACTS FOR THE AIR
MINISTRY, FORD MOTOR CO., CADBURYS,
VICKERS-ARMSTRONG, TURNERS ASBESTOS,
BOWATERS, UNILEVER, FERRANTIS.

Licencees for
"CHEECOLITE"
ROOF AND FLOOR
SCREEDS

Speed and efficiency ensured by use
of modern plant operated by skilled
labour.

Licencees for
"SYNTHANITE"
FLOOR
SCREEDS

*Photos: Laying & Power Floating
semi-dry Granolithic
Flooring*

All enquiries to:

P. B. INDUSTRIAL FLOORING LTD.

Malvern House,
Green Lane, Liverpool, 13.
Tel. STOnycroft 5351 2/3

473, New Cross Road,
London, S.E.14.
Tel. TID 4438 9



CYGNET

Craftsmen in Laboratory Furniture

RECENT IMPORTANT CONTRACTS

*include laboratory
installations for—*

Beecham Maclean Limited—New Research Laboratories, Brentford.
Salford Grammar School. Architects—Taylor & Young. F.A.R.I.B.A.
Philblack Limited—Laboratories at Avonmouth.
Architects—Sir Percy Thomas & Son. F.A.R.I.B.A.
Royal Grammar School, Newcastle—Science Block extension.
Architects—Spence & Price. A.R.I.B.A.
Transparent Paper Limited—Bury.
University College, London.
Architects—Corfiato, Thomson & Partners. F.A.R.I.B.A.
Warwickshire County Council—Polesworth School.
Department of Health for Scotland—Brown Trout Research Laboratories,
Pitlochry.
Natural Sciences Building, Swansea.
Architects—Sir Percy Thomas & Son. F.A.R.I.B.A.
North Western Gas Board, Lostock Hall, Preston and at Denton.
Dunlop Cotton Mills Ltd.—Rochdale.

Send for
full details
now.

THE MARK OF THE



*Built to meet the most exacting demands, "CYGNET"
Benches, with heat and acid-resisting tops, Racks,
Fume Cupboards, Cabinets and Shelving, are made in
a large range of standard units or to specification.*

CYGNET JOINERY LTD, DEPT. ARJ, HIGHER SWAN LANE, BOLTON

SPECIFY WITH PLANNING THE NEW SUGG HALCYON SELECTIVE AIR HEATER

IMMEDIATE WARMTH . . . FOR
SEVERAL ROOMS . . . BY SIMPLE
FINGER-TIP CONTROL

CAPITAL COST UNDER £80



The flexibility of the Halcyon Gas Heater makes it an eminently suitable heating installation for every type of residence – from bungalows and houses to flats.

Built for operating in a very small cupboard, its unusual compactness, combined with its many outstanding

features, have made instant impact on architectural plans in all parts of the country.

Halcyon offers highly efficient heat transference to the air flow, resulting in a discharge of pure warmed air within a few minutes. Halcyon is silent – there is no smoke – there are no fumes.

*Full literature and technical details available
from the manufacturers:*

WILLIAM SUGG & COMPANY LTD.
67-73 REGENCY ST., LONDON, S.W.1 Tel. VICTORIA 3211

GATWICK AIRPORT

for Ministry of Transport
and Civil Aviation

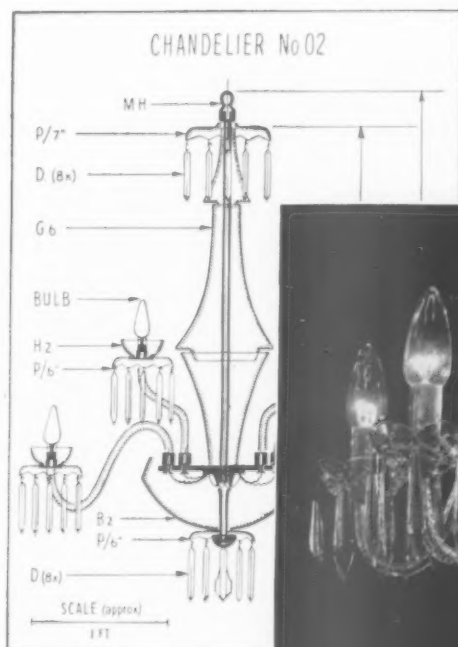


Metal windows supplied and fixed to 1st floor of the Pier, G.P.O. Block and Boiler House and Metal Ventilator Inserts to the cladding to the Terminal Building.



MELLOWES & CO. LTD.
SHEFFIELD LONDON OLDHAM

Consulting Engineers: Frederick Snow & Partners
Architects: Messrs Yorke, Rosenberg & Mardall
Main Contractors: Turriff Construction Co. Ltd.



Waterford Chandeliers



Beautifully hand cut from full lead crystal, Waterford Chandeliers are available in sizes suitable for modern interiors. Chandeliers can be supplied from stock in original Waterford designs or in new designs in the highest Waterford tradition. Waterford Glass are also glad to make up chandeliers to architects' own specifications. Particulars of this service will be sent on request.



WATERFORD GLASS LIMITED, WATERFORD, IRELAND
Enquiries for Britain, Australia and New Zealand should be directed to the Sole Agents
J. WUIDART & CO. LTD., 15 RATHBONE PLACE, LONDON, W.1

TWO BOOKS BY TETSURO YOSHIDA



THE JAPANESE HOUSE AND GARDEN

This book, which fully describes and finely illustrates the traditional Japanese house and its intimate, harmonious relationship with the garden in which it stands, offers to Western architects an invaluable object lesson in the practical application—with centuries of tradition to prove its success and versatility—of the principle of modular construction. The module is the standard sized 'mat' and the building components are all standardized in dimensions related directly to this. Size 10½ in. by 8½ in. 206 pages, 250 half-tone and line illustrations and a frontispiece in colour. 60s. net, postage 2s.



GARDENS OF JAPAN

In this book, the same author presents a full-scale study of the Japanese Garden, considered from the viewpoint of design. He analyses all the simple basic elements traditionally used—trees, shrubs, rocks, stone and water—defines their symbolic significance, and the accepted rules for their arrangement; he deals with design details—ground coverings in grass, moss, pavings and cobbles; and, with plans and photographs, he shows how Japanese designers achieve a perfect harmony of house and garden. Size 11 in. by 8½ in. 196 pages including 224 illustrations, with a frontispiece and three plates in colour. 63s. net, postage 2s.

THE ARCHITECTURAL PRESS
9 Queen Anne's Gate, S.W.1

- ★ The specially designed furniture and furnishings for the executive offices, dining room, etc., of the
- ★ NORTHERN ALUMINIUM COMPANY AT ROGERSTONE
- ★ were executed by Ian Henderson Ltd., in co-
- ★ operation with Frank Scarlett, Esq., F.R.I.B.A.



AN INTERESTING FLOATING SIDEBOARD in Australian Blackwood and ebony, installed in a Directors' dining room. The centre portion is fitted with trays, having direct access to the servery. This dining room forms part of the new executive offices of The Times Furnishing Co. Ltd., completely designed and executed by Ian Henderson Ltd.

Ian Henderson Ltd. are organised to carry out furnishing schemes to the requirements of architects and interior designers, or to submit new designs.

Specialists in complete office and domestic interiors, including panelling, fitments, fine carpets and beautiful textiles.

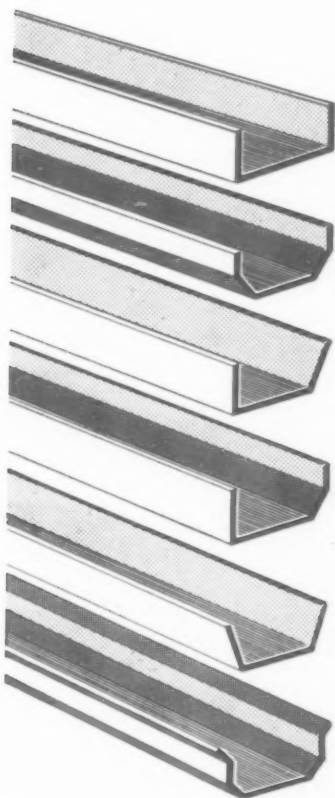


Ian Henderson Ltd

181 SLOANE STREET · LONDON S.W.1

(200 yards from Knightsbridge on the left)

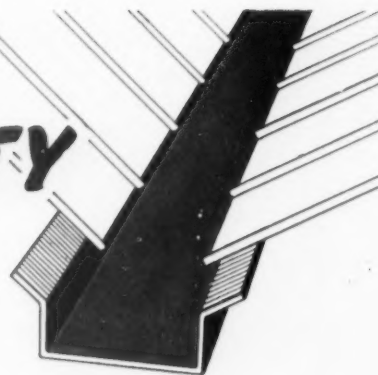
Telephone: BELgravia 3271-2



Where **DURABILITY** is Vital

Out of sight, yet playing an important part in the protection of a building and its contents, roof gutters must be robust and dependable. Produced by specialists in the fabrication of steel, 'Harco' Pressed Steel Gutters conform to B.S. 1091/1946. They are made in standard sizes or to special girths and lengths to meet specific requirements, with pressed socketed joints or butt straps. Supplied self-colour, in painted finish or hot-dip galvanized after manufacture by the 'Harco' process.

Send for List No. AR 942



'HARCO' HEAVY GAUGE PRESSED STEEL GUTTERS

Harvey

G. A. HARVEY & CO. (LONDON) LTD
Woolwich Road, London, S.E.7. GREENWICH 3232 (22 lines)

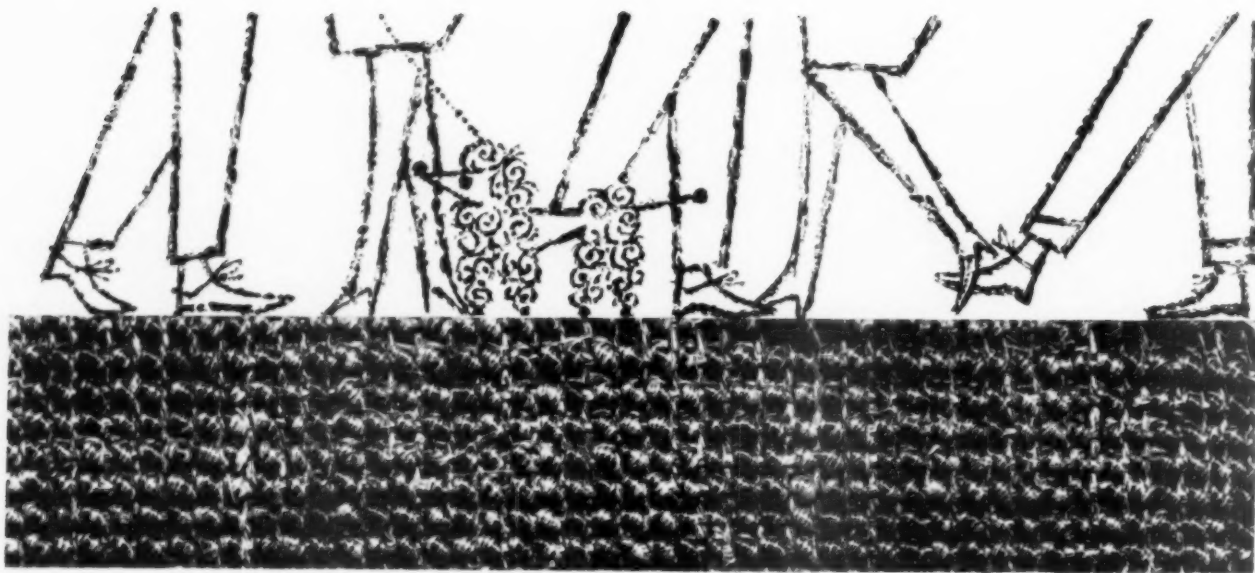
PUZZLED?



It's not a crinoline dustbin, nor a gold plated potato peeler—it's a Harrison No. 1523 Bales Catch, recognised by craftsmen and handymen everywhere as the best they can buy. Made from solid brass, it has a full size precision ground steel ball, a parallel standard-fit body, and requires no gouging of woodwork. If they ask for the best—

LOOK TO
HARRISON
FOR
THE ANSWER

HARRISON (BIRMINGHAM) LTD · P.O. BOX 233 BRADFORD STREET WORKS, BIRMINGHAM 12



Hundreds and thousands of tramping feet have proved the toughness of Sisalana. No wonder architects and industrial and exhibition designers all over the country are praising this new floor covering. Made from Sisal, it is very hard-wearing, yet elegant enough to make an effective display background. Sisalana is 35" wide, comes in many subtle off-beat colours, and can be bought only at Libertys. Contract price 18/6 a yard.

Liberty & Co Ltd, Regent Street, London W1 (Regent 1234)



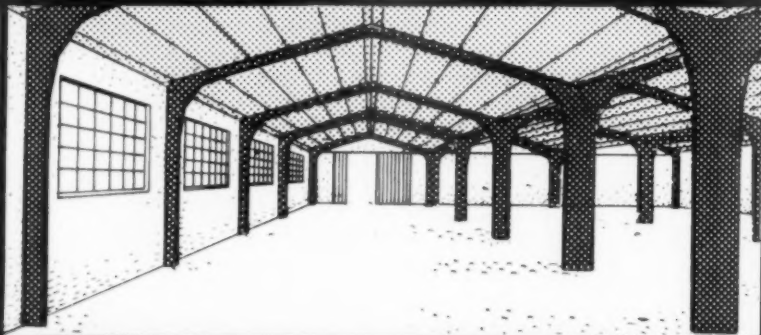
Liberty contracts



PROBLEM : Top-speed building at less cost

RANGE OF RIDGE TYPE PORTALS

Span	Eaves	Centres
30'	12'	12'
40'	14'	14'
50'	16'	16'
60'	18'	18'
70'	20'	20'



SOLUTION : **CYGNACRETE**



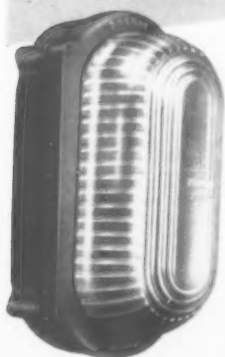
PORTAL BUILDING UNITS

Pre-cast under closely controlled conditions at our works, time saving portal units are ready for erection immediately site preparation has been completed. Speedily erected, initial and maintenance costs are low. Minimum fire risk.

For information and technical advice, contact:

WILLIAM TOWNSON & SONS LIMITED, HIGHER SWAN LANE, BOLTON

Telephone: Bolton 10140 (10 lines)



*to-day's
brightest
prospect*

DORMAN **DIOPAL**

DIOPAL, the competitive fitting designed to meet the demand for a medium priced prismatic lighting fitting combining the required essentials with excellent appearance. The opalescent prismatic glass gives wide light dispersion and the body and frame are die-cast from high quality aluminium alloy (L33) which is anti-corrosive. The frame incorporates an asbestos gasket to exclude dust and water.

TILTED DIOPAL The tilted DIOPAL is a further development of the popular DIOPAL and has been designed to give maximum downward light dispersion. The prisms are specially moulded and contoured to direct the light 15° downwards from the horizontal. Other features of this fitting are as the standard DIOPAL.

DIOPAL fittings are specially designed for lighting corridors, stores, stairways, archways, garages, platforms and similar buildings. Send for latest Lighting Fittings Catalogue.

DORMAN & SMITH LTD

PRESTON Atherton Works, Blackpool Rd., Preston, Lancashire. Tel: Preston 86785 (6 lines)

LONDON 125 High Holborn, W.C.1
Tel: CHAncery 6431

BIRMINGHAM 23 Graham Street, Birmingham, 1
Tel: CENTral 2009

GLASGOW 249 St. Vincent Street, Glasgow, C.2
Tel: CENTal 2479

To: DORMAN & SMITH LTD., Atherton Works,
Blackpool Road, Preston, Lancashire

Please send latest Lighting Fittings Catalogue

NAME _____

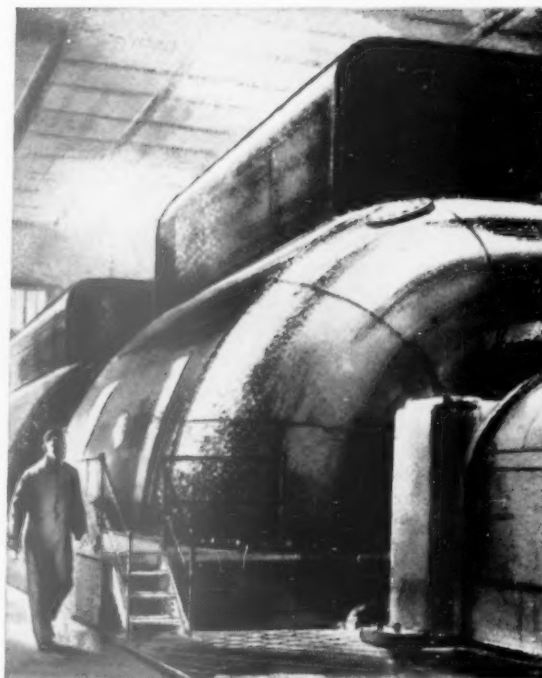
POSITION _____

FIRM _____

ADDRESS _____

AR 10/58

CUT HERE



The world's largest Generators will help to fill the demand for still more power

The development of nuclear energy for generating electricity is still front-page news. Less publicised, though no less outstanding, are new developments in "conventional" generating plant. The turbo-alternator shown here is a 550,000 kilowatt unit - twice the capacity of the next largest on order for the Central Electricity Generating Board. It has been designed for the projected new power station at Thorpe Marsh. For Blythe "B", another new station, 275,000 kilowatt in-line units are on order. They will be powered by steam at 2,350 lb. per sq. in. and 1,050° F, with reheat to 1,000° F.

Nuclear power will play an important part in meeting the ever-increasing demand for electricity. Work is now in progress on the first three nuclear power stations, at Bradwell, Berkeley and Hinkley Point. By 1966/7 some 5 to 6

million kilowatts of nuclear-generated electric power will be available.

Though these projects will not be completed for some time, the Central Electricity Generating Board plays an important part in today's fight against inflation. Power stations are being built at a cost no greater than in 1948 - £50 per kilowatt installed. And, although the output of the industry has doubled since 1948, the increase in man^d power is only about one-third.

By providing today for the power we shall need in years to come, the Central Electricity Generating Board is building a secure foundation for our future prosperity.



**THE CENTRAL ELECTRICITY
GENERATING BOARD**

these New Facts

PROVE

ARBOSEAL

outdates all other Sealing Strips!

- Based on a *polythene* plasticised medium, it supersedes traditional Vegetable oil based mastics and sealing strips.
- Completely inert and impervious to water and ultra-violet light.
- Provides a resilient seal or gasket with great powers of recovery under thermal movement.
- Joints and seals almost all building materials.
- Never hardens or dries out.
- Easily removed from the reel.
- Available in flat or round sections.
- No paint protection required.

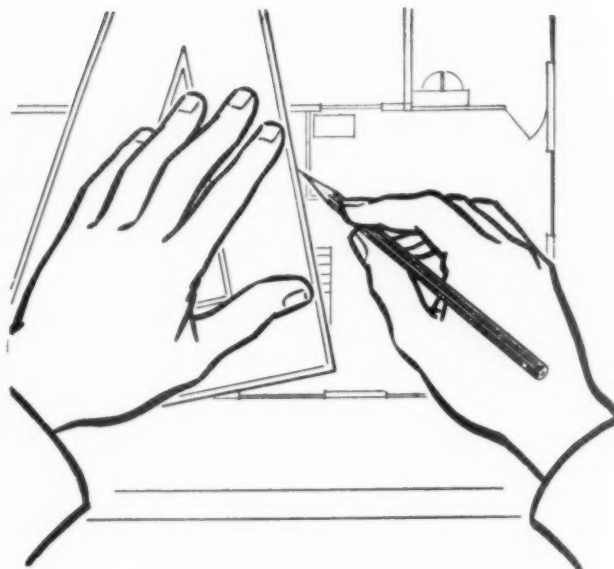
Send for descriptive leaflet.



ARBOSEAL

mastic strip with
Polythene base

sole manufacturer:
Adshead Ratcliffe & Co. Ltd.,
Belper, Derby. Tel.: Belper 351/2



"To a chap like me –
and I'm proud of my work – my pencil's
my living.

The pencils I use have to stand up to fast
hard work, their grading's got to
be absolutely spot on – not almost
or nearly but bang on the dot every
time.

The leads must hold their points
and flow smoothly throughout a long line –
no crumbling or 'clinkers' mark you! –
and if I erase a line it must go cleanly –
there's no 'furrow' left in my paper
so you won't find ghost lines in prints
made off my drawings. As a matter of
fact you can tell from a print when it is
my drawing – the print's always first class."

"What pencils do I use?"

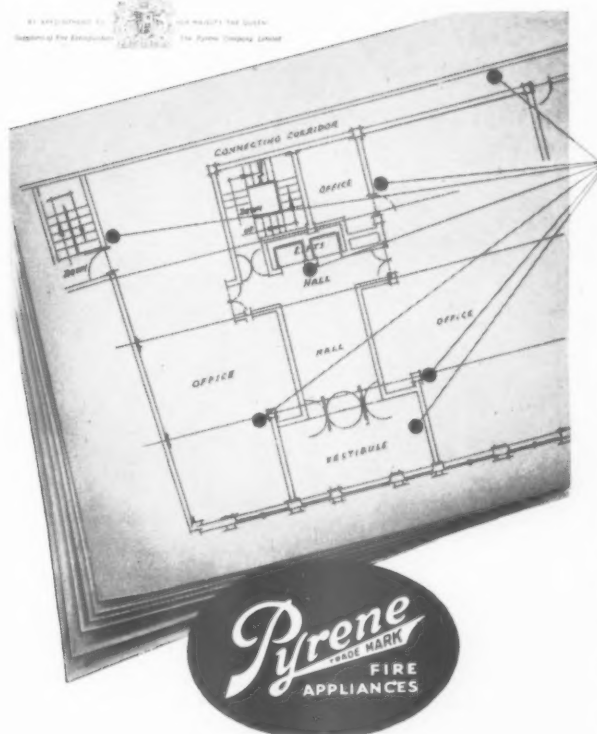
"Venus drawing pencils of course, the
ones with the crackle finish! – how else do
you think I keep up my high standard?"

VENUS
DRAWING
PENCILS

*VENUS Drawing pencils are made in 17 accurate
grades from 9H to 6B.

THE VENUS PENCIL CO. LTD., LOWER CLAPTON RD., LONDON E.5

BY APPOINTMENT TO
HER MAJESTY THE QUEEN
Suppliers of the Pyrene Company Limited



Let us co-operate on planned fire protection

In the design and construction of modern buildings the planning of Fire Safety is of vital importance, demanding careful consideration at the very outset. The co-operation of the Pyrene Company's Fire Engineers has been at the service of Architects and Surveyors for over 40 years and today their expert and impartial advice is relied upon universally.

"Pyrene" Fire Protection includes Hand-operated and Portable Equipment of every type, including Hose and Hydrants, Hose Reels, Foam, CO₂ and Dry Chemical Installations. There are also "Pyrene" Fire Detecting Systems designed to give automatic warning of fire at any time—day or night.

The "Pyrene" Fire Extinguisher Hire Maintenance Plan, available to architects' clients, provides the right number and types of extinguishers with constant inspection and maintenance. For full information and advice please write to Dept. AR 10

THE PYRENE COMPANY LIMITED

9 GROSVENOR GARDENS, LONDON SW1 (Tel: Victoria 3401) Head Office & Works: BRENTFORD • MIDDLE Canadian Plant: TORONTO



BEACONSFIELD PUBLIC LIBRARY
"WOODWELD" PORTAL FRAMES 30' 6" SPAN

SUTCLIFFE'S SPECIALISE in the manufacture of **TIMBER** STRUCTURAL UNITS

of all types to
INDIVIDUAL requirements

*Boxstring Trusses
Lattice Girders
Shell Roofs
Roof and Floor Decks
Box Beams
Portal Frames
Plain and Glazed Curtain Walling
Doors. Windows*

Consultant:
Mr. D. W. Cooper B.Sc., A.M.I., Struct.E., F.Inst. W.Sc.
• Technical Data available from the Manufacturers:

F. & H. SUTCLIFFE Ltd.,

**72 Wood Top,
HEBDEN BRIDGE, YORKSHIRE**

Tel. Hebden Bridge 217 (3 lines)



CLEAN AIR ACT 1956

4 & 5 Eliz.2Ch.52

Section 34 (2) provides :—

"In this act 'dark smoke' means smoke which, if compared . . . with a chart known . . . as the Ringelmann Chart, would appear to be as dark as or darker than Shade 2 on the chart."

No. 3 RINGELMANN
IS A FLAGRANT OFFENCE UNDER THE ACT

No. 2 RINGELMANN
FAILS TO COMPLY WITH THE ACT

No. 0 RINGELMANN
IS ASSURED WITH THE:

OLDBURY CHAIN GRATE STOKER

which anticipated the Clean Air Act by 14 years

Today more than 5,000 Oldbury Stokers are serving industry, burning solid fuels in the widest variety, **EFFICIENTLY, SMOKELESSLY.** Leave nothing to doubt. To comply with the Act, consult Edwin Danks at Oldbury or the nearest Branch Office.



EDWIN DANKS & CO
(OLDBURY) LTD.

OLDBURY near BIRMINGHAM
Tel.: (Stoker Division) Brierley Hill 7731

LONDON • CARDIFF • GLASGOW • LEEDS
MANCHESTER • NEWCASTLE-ON-TYNE



Secret Formula ?

No, it simply means that McKechnie have the answer to every production need. Whether extruded sections in brass, bronze, nickel silver or copper from over 20,000 dies available, or brass rods in straight lengths or coils for high speed turning and screwing, it is the consistently high quality and faultless finish of McKechnie products that has made them the choice of Industry throughout the world.



McKECHNIE

HIGH QUALITY

**EXTRUDED SECTIONS and
BRASS RODS for Industry**

McKECHNIE BROTHERS LIMITED

14 Berkeley Street, London, W.1. Telephone: Hyde Park 9841/7.
Metal Works: Rotton Park Street, Birmingham 16 and Aldridge, Staffs.
Other Factories at Widnes, London, South Africa, New Zealand.
Branch Offices at London, Manchester, Leeds, Gloucester,
Newcastle-upon-Tyne, Glasgow (Agents J. Hood & Co.), Paris.

THE
ALUMINIUM
BALUSTRADING
for the
OFFICES OF THE
NORTHERN ALUMINIUM CO.
ROGERSTONE, MON.
was supplied by
GARDINER
OF BRISTOL

GARDINER, SONS & CO. LTD., BRISTOL 2

LATEX and PLASTIC FOAM
CUSHIONING for
LONG LENGTH SEATING

as used in

- HOTELS, BARS & CLUBS
- MUNICIPAL BUILDINGS
- RECEPTION AND WAITING ROOMS
- SCHOOLS AND LECTURE HALLS
- WINDOW BAYS AND ALCOVES
- EXHIBITION STANDS



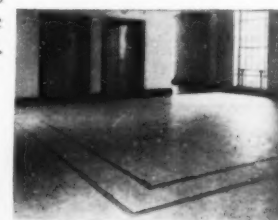
Dunlopillo cushions and backrests supplied to any specification, uncovered or covered and ready for installation on site.

SEND FOR ILLUSTRATED LIST

LATEX UPHOLSTERY LTD.
THE LEADING SPECIALISTS
41, LONSDALE ROAD, LONDON, W.11
Telephone: BAYSWATER 6262-5



Take, particularly, the Korkoid Floor, with its comfortable feel, its attractive appearance and virtually everlasting wear. Any conceivable design can be incorporated and there are 70 colours from which to choose. Korkoid is ideal for the largest hall or the smallest room. No wonder Korkoid Decorative Floors have 'taken the floor'—over 50,000,000 square feet of it altogether—in ships, hotels, hospitals, railways, government and commercial buildings and dwelling houses all over the world.



KORKOID

Birmingham Civic Centre
Alliance Assurance Co. Ltd., London
British Hotels & Restaurants Association, London



KORKOID DECORATIVE FLOORS

PROPRIETORS: ROWAN AND BODEN LIMITED

95, BOTHWELL STREET, GLASGOW, C.2

ALSO AT LONDON, NEWCASTLE, BIRMINGHAM, BELFAST, LEEDS, LUTON, LIVERPOOL, MANCHESTER, BRISTOL, EDINBURGH, ABERDEEN, LINCOLN

Look into **QUICKTHO** Roof Light advantages

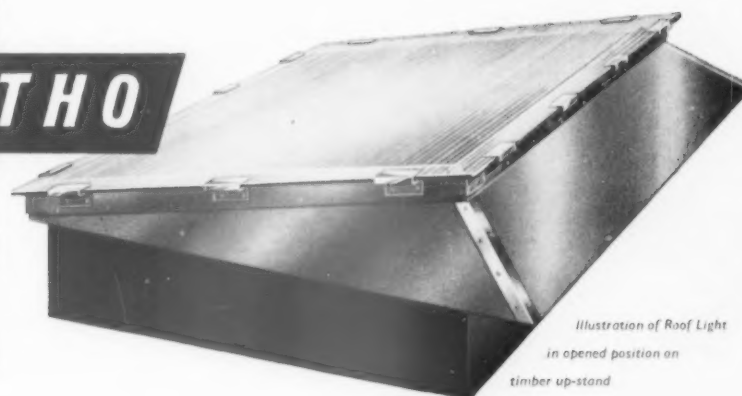


Illustration of Roof Light
in opened position on
timber up-stand

Our technical staff
is always at
your service

The maximum light for area, complete weather protection and permanent natural ventilation are offered by QUICKTHO high-corrosion-resisting aluminium Roof Lights.

A simple, efficient balanced action operates for opening, closing and locking. Supplied factory glazed, complete for fixing. A fixed type QUICKTHO Roof Light is also available as single unit or for continuous runs.

Please send for details to:

QUICKTHO ENGINEERING LTD., POINT PLEASANT, WANDSWORTH, LONDON, S.W.18

Telephone: VANDyke 4115/6

Telegrams: Quicktho, Put., London



Architect: C. W. Hutton, B.A.R.C.H., F.R.I.B.A.
Consulting Engineer: H. G. Cousins, B.Sc., M.I.C.E., M.I. STRUCT.E.

General Contractors: C. H. Pearce & Sons (Contractors) Ltd.

PAROPA — the versatile roofing material

This garage roof at Clifton, Bristol, displays the versatility of PAROPA — for, in addition to being a most durable roofing material with excellent insulating properties, it can be used for such purposes as this parking space, and also to provide a surface for storage of plant and on roofs of factory buildings.

Just over 600 square yards of PAROPA granolithic finish divided into 6' x 6' squares were laid to a depth of 1½" for this garage building occupied by Messrs. Windmill & Lewis Ltd. of Merchants Road, Clifton. Areas where concentrations of oil droppings might occur were protected with a suitable concrete road paint.

PAROPA is ideal for *all* flat roofing; for terraces, forecourts, sun lounges, balconies and swimming pool surrounds. It can be laid in situ to any area, shape or angle—to any brick, concrete or asphalt surface.

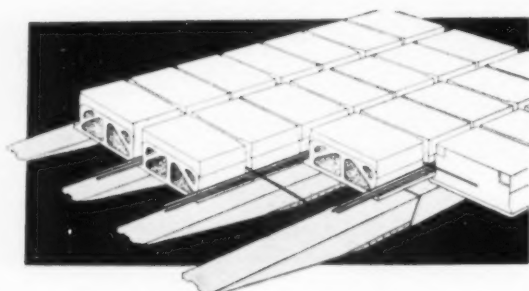
FRAZZI LIMITED SPECIALISTS IN ROOF AND FLOOR CONSTRUCTION

LENNOX HOUSE, NORFOLK STREET, STRAND, W.C.2 Tel: **TEMple Bar 5371**
Dutton Road, Sheffield, 6 Tel: **Sheffield 345241**

ASSOCIATE COMPANY: Paropa (Scotland) Ltd., 10 Claremont Terrace, Glasgow, C.3
AGENTS: Robert Kirk Ltd., Exchange St., Belfast Murphy Bros., 3 Castlewood Av., Dublin.

SMITH'S

TWO-WAY REINFORCED SUSPENDED FLOORS & ROOFS



Smith's TWO-WAY reinforced Floor has gained the reputation of being the finest for modern building. It combines advantages of both precast and in situ Floors, which guarantees a better load distribution.

For full particulars apply to

SMITH'S FIREPROOF FLOORS LTD

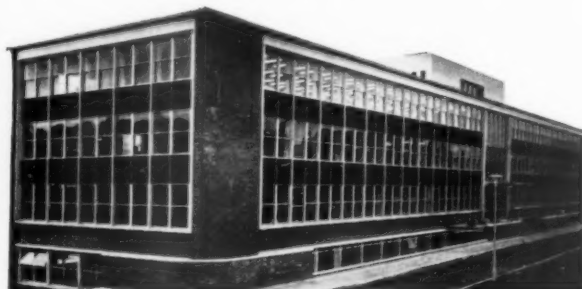
IMBER COURT, EAST MOLESEY, SURREY

'Phone: Emberbrook 3300

IT COSTS SO LITTLE TO HAVE THE BEST

Mineralite insitu and precast

was extensively used on this contract



Offices for Northern Aluminium Co., at Rogerston, Mon.

Architect: Frank Scarlett, Esq., F.R.I.B.A.

The insitu Mineralite work was carried out by

E. E. CHEESEMAN & SONS LTD.

2, Stanstead Road, London, S.E.23

The precast Mineralite by

COOPER, WETTERN & CO. LTD.

55/56, Dingwall Road, Croydon, Surrey

For information

MINERALITE LTD.

55/56, Dingwall Road, Croydon, Surrey. CROydon 3875



just published

The Landscape of Power


by Sylvia Crowe, P.I.L.A.

THIS BOOK is addressed to everyone who cares about Britain's landscape. Sylvia Crowe, the eminent landscape architect, is not a preservationist. She accepts the fact that you cannot put the clock back; she accepts the essential need for the construction of immense oil refineries, nuclear reactors, power stations, and the network of the electricity grid. 'This network of power', she says, 'opens up a prospect of future wealth for the country, of clean industry and more efficient agriculture.' What she will not accept is that the introduction of these vast new structures into the landscape need necessarily ruin it, and in this practical, lucidly written handbook she calls for more thoughtfulness among those who are responsible for their construction. She shows, with text, photographs and diagrams, that giant buildings and their accessories can be incorporated in the landscape without destroying it—indeed, that given skilful design and sensitive siting they can in some circumstances enhance the natural scene.

There are nine chapters in the book and they deal with The New Industrial Age; Power and National Parks; Nuclear Power Stations; Hydro-Electric Power; Electric Transmission; Oil; Airfields; New Industries in Old Areas; Conclusion. Size 8 $\frac{3}{4}$ in. by 5 $\frac{1}{2}$ in. 116 pages including over 70 diagrams and halftone illustrations. 16s. net, postage 10d.

The Architectural Press, 9 Queen Anne's Gate, SW1

flexibility BRIANCO have again extended and improved on their range of Component Furniture. We list here some of the new features that are available now.




a. New table tops edged in solid mahogany. Top shown 50ins. x 16ins. Price 65/-

b. New legs: 1. Vertical tubular leg, 10ins. with glide 8.6 each. 2. Square section, 10ins. with glide 9.8 each.

c. New bureau unit, mahogany veneered, magnetic catch, 2ft. bins. 1ft. x 1ft. bins. Shown here on ladder units. Price £9.5s.

d. Some of the many shelves and drawers etc. available. The complete arrangement shown here costs under £35.

e. Floor surfaces are protected by the changes made to our leg units. Insert shows New nylon-plastic self-adjusting glide now on all single metal and tubular legs. Hairpin & tripod legs are shod with disc feet and all wooden legs now have metal fixing plates either vertical or splayed.



f. Desk 40ins. x 25 ins. x 28ins. drawers assemble left or right. 15 Guineas.

BRIANCO LONDON LTD
507, HACKNEY RD. LONDON E.2



clearly DUPLUS

DOMELIGHTS

toplighting at its best

Duplus Domelights in Perspex—weatherproof and shatter resistant. Special turn-down edge gives additional strength and better weather proofing.

Circular up to 70" diameter.

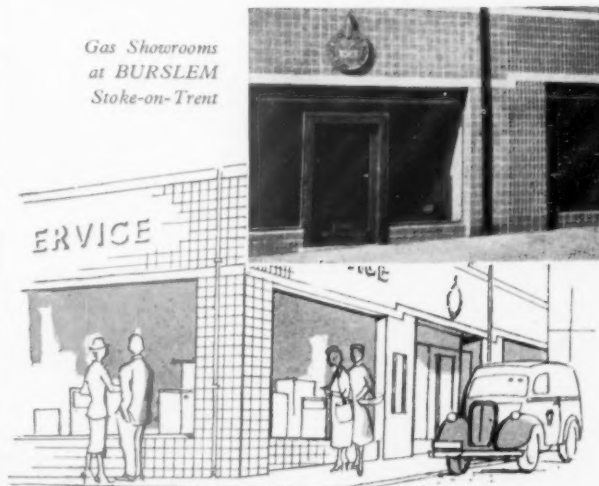
Rectangular up to 106" x 70".

Prefabricated curbs available. Full details sent on request.

DUPLUS DOMES LTD., Albion Street, LEICESTER

JAMES
make good
METAL
WINDOWS

W. JAMES & CO. LTD.
Hythe Rd. Willesden Junction
LADBroke 6471 (6 lines) N.W.10



Gas Showrooms
at BURSLEM
Stoke-on-Trent

MALKIN
★
REDHILL

WALL TILES

Tiles are part of the contemporary scene.

To their historic practical qualities Malkin

have added today's wide scope of colour

and design, so that architects are using

them to advantage in an increasing number of ways and places.

For further details write to:—

THE MALKIN TILES (Burslem) LTD., Burslem, Stoke-on-Trent. Tel. 87287

Members of the Glazed and Floor Tile Manufacturers' Association

the PERSPECTIVIST

By R. Myerscough-Walker.
The making of a perspective is a highly skilled task, and can often be the deciding factor when an architect submits a scheme. In this unique book, the author not only covers every aspect of the subject (including costing, copy-right and architect-client relationships), but goes further and presents his own deeply philosophical attitude to his art. The clarity and impact of his writing and the countless illustrations make this a rare and unusual book. From booksellers, 60/- net.

PITMAN

Parker St., Kingsway,
London, W.C.2

safe chemical drainage means...

"VULCATHENE"

REGD.

The only acid-resisting system of pipes and fittings where the whole installation, from start to finish, can be made from our stock components and without using any different material.

"Vulcathene" is specified and used all over the world by leading architects and authorities for the conveyance and control of corrosive liquids.

write for brochure:

J. S. & F. FOLKARD LTD.

RECTORY LANE · EDGWARE · MIDDLESEX · ENGLAND

A Picture of Efficiency



Manlove Hi-Speed STERILIZING
means HIGHER TEMPERATURE · HIGHER VACUUM ·
REALLY RAPID STERILIZING.

If you have a Sterilizing problem let **Manlove** solve it.

MANLOVE ALLIOTT & CO LTD
BLOOMSGROVE WORKS · NOTTINGHAM
London Office: 41/42 PARLIAMENT STREET · WESTMINSTER S.W.1
Telephone: WHITEHALL 1501-2

Metal Letters

In STAINLESS or ENAMELLED STEEL

CAST BRONZE LETTERS
(including CERAMIC Filled)
Write for New Illustrated List

ENGRAVED BRONZE PLATES
PERSPEX LETTERS



COMPLETE INSTALLATIONS erected and maintained for the Trade using plain vans

Chase Products
(ENGINEERING) LTD

27 PACKINGTON ROAD · SOUTH ACTON, W.3
Telephone: Acton 1153-4

BOOKS BOOKS BOOKS BOOKS BOOKS

you are invited to write for our
current free illustrated catalogue of books
on architecture, planning and kindred
subjects to THE ARCHITECTURAL PRESS
9-13 Queen Anne's Gate Westminster S.W.1

BOOKS BOOKS BOOKS BOOKS BOOKS

**"IF YOU WERE ILL...
would your income be safe?"**



Most people face a big drop in income sooner or later if they cannot work from illness or accident. Are *YOU* insured against this risk?

"HOW DO I INSURE MY INCOME?"

By taking out a **PERMANENT SICKNESS INSURANCE POLICY** to provide a weekly income if illness or accident stops you working.

"HOW LONG DOES THE INSURANCE LAST?"

It is usual to take a policy that goes on to age 65 so that you are protected throughout normal working life.

"CAN I CLAIM MORE THAN ONCE?"

Yes. As often and for as long as necessary. If you are so ill that you cannot work again, the payments continue as long as the insurance lasts.

"CAN THE POLICY BE CANCELLED BY THE COMPANY IF I CLAIM HEAVILY?"

NO. No matter how much benefit you draw the Company cannot cancel or amend the Policy on this account.

"HOW MUCH DOES IT COST?"

That depends on your age at entry and the type of benefit. If you do not need payments to begin until you have been off work for six months you can secure

£5 a week

UP TO AGE 65 FOR **£5 A YEAR**

If you are under 32 now and can pass a medical examination. (You can start at any age up to 50).

P
S
i

THE PERMANENT SICKNESS INSURANCE CO. LTD
3 CAVENDISH SQUARE, LONDON, W.1 Tel: LAngham 0341
(4 lines)

Please send me full particulars of Permanent Sickness Insurance:

NAME _____

ADDRESS _____

E

COMPONENT FURNITURE
of Style and Beauty



Send to-day for free fully illustrated catalogue showing many delightful designs from the Hybrit range of contemporary room dividers, tables, chairs, ladder units, easily assembled leg units etc. Or call at our show-rooms at 493, Cambridge Heath Road, London, E.2, or 11-13, Bell Road, Hounslow, Middlesex.

WE WILL BE PLEASED
TO QUOTE YOU FOR
ANY SIZE LEG OR
TABLE TOP NOT IN
OUR RANGE.

ALL POST AND PACKING FREE

SINGLE PIN METAL	
9"	4.2 ea
12"	4.9 ea
15"	5.3 ea
18"	5.9 ea

DOUBLE PIN METAL	
9"	5.3 ea
12"	5.9 ea
15"	6.3 ea
18"	6.9 ea
21"	7.3 ea
24"	7.9 ea

SHOWED BEECH BRASS TIPS	
9"	6.6 ea
12"	7.4 ea
15"	8.0 ea
18"	8.6 ea
21"	10.4 ea
24"	12.2 ea

Examples from our range of leg units

BYBRIT DISPLAYS (Dept. AR)
493, CAMBRIDGE HEATH RD., LONDON E.2
Tel: SHoreditch 9181



Architects: Messrs. Priestman & Lazenby, Chartered Architects, Hull.

Entrance to Hull City
Police Headquarters,
Queens Square, Hull.

CONSTRUCTED BY

Masons
THE STOREFITTERS

GELDERD ROAD
LEEDS, 12

128 BAKER STREET
LONDON, W.1



FOR over fifty years Libraco Ltd. have been designing and manufacturing furniture and woodwork of all descriptions for

**LIBRARIES
SCHOOLS & OFFICES**

The illustration shows the MEMORIAL LIBRARY,
MARLBOROUGH COLLEGE, MARLBOROUGH,
recently equipped by Libraco Ltd.

Write for Illustrated Booklet

LIBRACO
LIMITED

LOMBARD WALL, WOOLWICH ROAD, CHARLTON, LONDON, S.E.7
Telephone: Greenwich 3308 & 3309

ALPHABETICAL LIST TO ADVERTISERS

	PAGE		PAGE		PAGE
Accrington Brick & Tile Co. Ltd.	CX	Frazer, Ltd.	CXXIII	Mellows & Co. Ltd.	CXIII
Adshel Ratcliffe & Co. Ltd.	CXXVI	Gardiner, Sons, & Co. Ltd.	CXXII	Midland Silicone, Ltd.	CXVII
Allied Ironfounders, Ltd.	II, CXXXV	Gascoigne, George H., Co. Ltd.	CXX	Mineralite, Ltd.	CXIV
Anderson Construction Co. Ltd.	IX	General Electric Co. Ltd.	CXXV	Montgomery Stobo & Co. Ltd.	CXXIV
Architectural Press, Ltd., The	CXIV, CXXIV, CXXV	Gibbons, James & Co. Ltd.	IV	Morris Rubber Industries, Ltd.	CXXVIII
Armstrong Patents Co. Ltd.	XII	Glazed & Floor Tile Manufacturers' Association	VII	Morris Singer Co. Ltd.	IVIII
Ascot Gas Water Heaters, Ltd.	IXXVII	Gliksten, J., & Sons, Ltd.	XX	Myton, Ltd.	XXII
Atlas Asbestos Cement Co. Ltd.	XXIII	Gyproc Products, Ltd.	IV		
Atlas Lighting Ltd.	XXVIII				
Automatic Telephone & Electric Co. Ltd.	XIX				
Banister Walton & Co. Ltd.	CXXIX	Hardwood Flooring Manufacturers' Association	I	Newman, William, & Sons, Ltd.	XLIII
Boston Foundries, Ltd.	XIV	Harrison (Birmingham), Ltd.	CXV	P.B. Industrial Flooring, Ltd.	CXI
Blundell Spence & Co. Ltd.	XXIX	Harvey, G. A., & Co. (London) Ltd.	CXV	Permanent Sickness Insurance Co. Ltd.	CXXVII
Bow Slate & Enamel Co. Ltd.	XXIX	Haywards, Ltd.	IVII	Pierhead, Ltd.	XLIV
Brady, G. & Co. Ltd.	XXII	Heal's	CXXVII	Pikington, Bros., Ltd.	XLIX
Brianes (London), Ltd.	CXXV	Henderson, Ian, Ltd.	CXIV	Pitman, Sir Isaac, & Sons Ltd.	CXXVI
British Constructional Steelwork Association	CXXVII	Heyman Construction, Ltd.	IXV	Pressure Piling Companies, Ltd., The	CXXVI
British Paints, Ltd.	IXXIX	Hickman, Ltd.	XCIV	Pyrene Co. Ltd.	CXIX
British Sanitary Fireclay Association	IXXII	Hill, Richard, Ltd.	IXIX	Pyrestos, Ltd.	CIV
British Titan Products Co. Ltd.	IX	Hille of London, Ltd.	XCIII	Pyrotenax, Ltd.	CXXI
Broughton Moor Green Slate Quarries, Ltd.	IXXVII	Hills (West Bromwich) Ltd.	C		
Bybit Displays	CXXVII	Holcon, Ltd.	IXXV	Quicktho (1928), Ltd.	CXXIII
		Holoplast, Ltd.	XXVIII		
Calders, Ltd.	CII	Hollow Seal Glass Co. Ltd.	IXII	Rawplugh Co. Ltd., The	XXV
Canadian Government	III	Hope, Henry, & Sons, Ltd.	IXXII	Rice & Son, Ltd.	CXII
Cape Building Products, Ltd.	XL	Horsley Smith, & Co. (Hayes) Ltd.	XC	Richards Tiles, Ltd.	IXIV
Carpet Trades, Ltd.	IXXIV	Hunter Douglas (Great Britain), Ltd.	IXVIII	Robertson Thain Ltd.	XXIV
Celotex, Ltd.	XXXV			Ruberoid Co. Ltd., The	XXIII
Central Electricity Authority	CXXII				
Chase Products, Ltd.	CXXVI	Ideal Builders & Radiators, Ltd.	XVI, XVII	Sadd, John, & Sons, Ltd.	CVIII
Clifford, Frank W., Ltd.	CIX	Imperial Chemical Industries, Ltd.	CVII	Sankey, J. H., Ltd.	IXXIII
Colthurst Symons & Co. Ltd.	IXI	Intermit, Ltd.	IV	Shanks & Co. Ltd.	CI
Copperad, Ltd.	XXXVIII			Simpson, W. B., & Sons, Ltd.	IX
Costain, Richard, Ltd.	IXXVI			Smith & Walton, Ltd.	XI
Cox & Co. (Watford) Ltd.	X	James, W., & Co. Ltd.	CXXV	Smith's Fireproof Floors, Ltd.	CXXIV
Cramer, Ltd.	XXI	Jones & Broadbent, Ltd.	II	Spencer Wire Co. Ltd.	VI
Crittall Manufacturing Co. Ltd.	XXX, XXXI, III			Stafford Furniture, Ltd.	CIX
Cygnat Joinery, Ltd.	CXII	Korkoid Decorative Floors	CXXII	Stainless Steel Sink Co. Ltd., The	CX
				Steel Radiators, Ltd.	IXII
Danks, Edwin, & Co. (Oldbury) Ltd.	CXX	Latex Upholstery, Ltd.	CXXII	Storry Witty, & Co. Ltd.	CVIII
Dawnays, Ltd.	IXVI	Leigh, W. & J., Ltd.	XXIX	Sugg, William, & Co. Ltd.	CXII
De La Rue, Thomas & Co. Ltd.	XXVIII	Liberty & Co. Ltd.	CXVI	Sutcliffe, F. & H., Ltd.	CXIX
Demolition & Construction Co. Ltd., The	IXXI	Libraco, Ltd.	CXXVII		
Dohm, Ltd.	V	Limmer & Trinidad Lake Asphalt Co. Ltd.	XV	Teleflex Products, Ltd.	IXXIII
Dorman Long, Ltd.	CIII	Line, John, & Sons, Ltd.	IXXVIII	Templeton, James, & Co. Ltd.	CV
Dorman & Smith, Ltd.	CXVII	London Brick Co. Ltd.	XLII	Thermalite, Ltd.	CXXX
Draftsels, Ltd.	IXXVIII	Luminated Ceilings, Ltd.	IXVII	Thermocontrol Installations Co. Ltd.	XII
D.S. Plugs, Ltd.	CXI			Tonks (Birmingham), Ltd.	XVI
Duphus Domes, Ltd.	CXXV	Maclean & Co. (Metal Windows) Ltd.	IXXIV	Townson, William, & Son, Ltd.	CXXI
		Malkin Tiles (Burslem), Ltd., The	CXXV	Trussed Concrete Steel Co. Ltd.	XII
Edinburgh Weavers, Ltd.	IXXVI	Mallinson, William, & Sons, Ltd.	XI		
Eco-Ensign Electric, Ltd.	XXVIII, XCIX	Mander Bros., Ltd.	IXXIX	Venus Pencil Co. Ltd.	CXXIII
Engravers Guild, Ltd.	CVI	Manlove, Elliott & Co. Ltd.	CXXVI		
Evode, Ltd.	IXXII	Marshall, S., & Sons Ltd.	XXV	Warerite, Ltd.	XLV
		Mason, Joseph, & Co. Ltd.	IXV	Waterbury, Ltd.	IVI
Farnlow, T. & W., Ltd.	XLVII	Mason, William, & Sons Ltd.	CXXVII	Westminster Bank, Ltd.	XCIII
Folkard, J. S. & F., Ltd.	CXXVI	Matthew Hall & Co. Ltd.	II	West's Piling & Construction Co. Ltd.	XCII
Fordham Pressings, Ltd.	XXVI	McKechnie Bros. Ltd.	CXX	Williams & Williams Ltd.	VIII, IX
		Mellor Bromley (Air Conditioning), Ltd.	CVI	Willard, J., & Co.	CXIII

The photograph shows "Confetti," the new look in flooring, installed in the Penhill Library.

This very attractive contemporary design is available in four different colour schemes which can be combined in innumerable ways to suit all styles of decor. "Confetti" is made in 18" squares to thicknesses of $\frac{1}{8}$, $\frac{3}{16}$, $\frac{1}{4}$.



rubber flooring by MORRIS

combines an inbred resistance to wear with an outward appearance which looks well in all kinds of surroundings. Available in many attractive colours and patterns, warm, hygienic, quiet and resilient, Morris Rubber Tiles will satisfy the architects' need for hard-wearing floor covering wherever people work and live.

Selected by the Council of Industrial Design for exhibition in The Design Centre.

Please let us send you more detailed information about Morris Rubber Flooring and, when in London, see our exhibit at The Building Centre, 26 Store Street, W.C.1.



cxxviii

MORRIS

RUBBER INDUSTRIES LTD.,
High Road · Byfleet · Surrey

Telephone: Byfleet 4351/3

Telegrams: RUBBER, BYFLEET

VOLUME ONE HUNDRED AND TWENTY-THREE JANUARY-JUNE 1958

ARTICLES AND ILLUSTRATIONS

	PAGE
Aberdeen Quarries, The (An Adam Miscellany). <i>Illustrated note by T. C. Barker</i>	107 108
Achthamar. <i>Illustrated article by Richard Burton, John Donat and Paul Koralek</i>	174 181
Adam Miscellany, An	102 109
African Texture. <i>Illustrated note by Arthur M. Foyle</i>	351 352
Airport, Birmingham, Passenger Building for Edndon. <i>Architects: Norman and Dawbarn. Model and plan</i>	48 49
Airport, Gatwick, Terminal Buildings. <i>Architects: Yorke, Rosenberg and Mardall. Models and plan</i>	48 49
Alderney, Maternity Hospital. <i>Architect: Richard Llewelyn Davies. Models and plan</i>	46 47
Aluminium Sash (The Industry). <i>Illustrated note</i>	362
America, Downtown (Townscape). <i>Illustrated note</i>	279 280
Amersham, Laboratories for Atomic Energy Commission. <i>Architect: Jefferys Mathews. Model and plan</i>	50 51
Applied Art: Painted Portals. <i>Illustrated note by Michel Santiago</i>	282
Arnold, Nottinghamshire, Grammar School. <i>Architects: Ministry of Education. Drawing and plan</i>	69
Art Nouveau Script. <i>Illustrated article by Roswitha Baumann</i>	369 372
Ascot on the Se-Duet (The Industry). <i>Illustrated note</i>	288
Asphalt Handbook (The Industry). <i>Note</i>	360
Athens, Studio. <i>Designer: N. Hatzikyriakos-Ghika. Interior views</i>	402 404
Bank, London, Queen Victoria Street, E.C.4. <i>Architect: John Wright. Exterior, interior views and drawings</i>	263 268
Bank, Maidstone, Barclays. <i>Architects: William Holford and Partners. Model and plan</i>	60 61
Basel, All Saints' Church. <i>Architect: Hermann Baur. Interior views</i>	251 254
Basildon New Town, Shops and Offices. <i>Architect: Noel Tweddell (Chief Architect, New Town Corporation). Drawing and plan</i>	11
Beadnell, Northumberland, Sailing Club. <i>Architects: Ryder and Yates. Exterior views and plan</i>	416
Belfort, Church of Ste. Jeanne d'Arc. <i>Architect: Marcel Lodz. Interior view</i>	248
Bexleyheath, Stores, Canteen and Offices for London Electricity Board. <i>Architect: Arthur Bailey. Drawing and plan</i>	52
Biography:	
Berkeley, Bishop. <i>Illustrated article by Marcus Whiffen</i>	91 93
Lamond of Dundee. <i>Illustrated article by David M. Walker</i>	269 271
Rumford, Count. <i>Illustrated article by W. J. Sparrow</i>	161 163
Birmingham:	
Edndon Airport, Passenger Building. <i>Architects: Norman and Dawbarn. Model and plan</i>	48 49
Flats and Houses. <i>Architect: A. G. Sheppard Fidler (City Architect). Drawing and plan</i>	76

Offices for Engineers and Allied Employers' Association. <i>Architect: John Madin. Exterior, interior views and plans</i>	236 239
Teachers' Training College. <i>Architect: A. G. Sheppard Fidler (City Architect). Exterior view and plan</i>	275
University, Chemistry Building. <i>Architects: Playne and Lacey. Models and plans</i>	34 35
Bishop Berkeley. <i>Illustrated article by Marcus Whiffen</i>	91 93
Blyth, Northumberland, Colliery Buildings. <i>Architects: Watson and Coates. Drawing and plan</i>	53
Board Room, London, Vigo Street. <i>Architects: John and Sylvia Reid. Interior views</i>	336 337

Book Reviews

Carrier, Robert and Oliver Lawson Dick. <i>The Vanished City. Reviewed by Priscilla Metcalf</i>	418
Cook, G. H. <i>The English Cathedral Through the Centuries</i>	418
Dale, Anthony. <i>James Wyatt. Reviewed by Christopher Gatch</i>	347
Espinasse, Margaret. <i>Robert Hooke. Reviewed by John Summerson</i>	347
Hendrick, T. W. <i>The Modern Architectural Model. Reviewed by Timothy Rendle</i>	347
Lawrenson, T. E. <i>The French Stage in the Seventeenth Century. Reviewed by Richard Leacroft</i>	277
Meeks, Carroll L. V. <i>The Railway Station. Reviewed by John Betjeman</i>	277
Nervi, The Works of Pier Luigi. <i>Reviewed by Nikolaus Pevsner</i>	417
Palme, Per. <i>Triumph of Peace: A Study of the Whitehall Banqueting House. Reviewed by Howard Colvin</i>	209
Perkins, Lawrence B. <i>Work-Place for Learning</i>	210
Peter, John. <i>Aluminium in Modern Architecture. Vol. I. Buildings. Reviewed by Michael Brawne</i>	209
Plommer, Hugh. <i>Ancient and Classical Architecture. (Vol. I of Simpson's History of Architectural Development, Revised.) Reviewed by William Bell Dinsmoor</i>	133
Rolt, L. T. C. <i>Isambard Kingdom Brunel. Reviewed by Eric de Marc</i>	417
Szarkowski, John. <i>The Idea of Louis Sullivan. Reviewed by Reyner Banham</i>	210
Valéry, Paul. <i>Eupalinos, ou l'Architecture. Reviewed by Reyner Banham</i>	229
Veronesi, Giulia and Josef Hoffmann (Editors). <i>Josef Hoffmann, Architeti del Movimento Moderno. Vol. 17. Reviewed by Nikolaus Pevsner</i>	347
Weidlinger, Paul. <i>Aluminium in Modern Architecture. Vol. II. Engineering Design and Details. Reviewed by Michael Brawne</i>	209
Whinney, Margaret, and Oliver Millar. <i>History of English Art 1625-1714. Reviewed by Nikolaus Pevsner</i>	209
Yorke, F. R. S., and Penelope Whiting (Editors). <i>Specification 1958</i>	210
Booking Hall, London, Bond Street, for Union Castle Line. <i>Architect: Michael H. Egan. Interior views and plan</i>	211 213

Books Reviewed

Aluminium in Modern Architecture. Vol. I. Buildings. <i>By John Peter</i>	209
Aluminium in Modern Architecture. Vol. II. Engineering Design and Details. <i>By Paul Weidlinger</i>	209
Ancient and Classical Architecture (Vol. I of Simpson's History of Architectural Development, Revised). <i>By Hugh Plommer</i>	133
Brunel, Isambard Kingdom. <i>By L. T. C. Rolt</i>	417
English Cathedral Through the Centuries. <i>By G. H. Cook</i>	418
Eupalinos, ou l'Architecture. <i>By Paul Valéry</i>	229
French Stage in the Seventeenth Century. <i>By T. E. Lawrenson</i>	277
History of English Art 1625-1714. <i>By Margaret Whinney and Oliver Millar</i>	209
Hoffmann, Josef: <i>Architeti del Movimento Moderno</i> , Vol. 17. <i>Edited by Giulia Veronesi and Josef Hoffmann</i>	347
Hooke, Robert. <i>By Margaret Espinasse</i>	347
Idea of Louis Sullivan. <i>The. By John Szarkowski</i>	210
Modern Architectural Model. <i>The. By T. W. Hendrick</i>	347
Nervi, The Works of Pier Luigi	417
Railway Station. <i>The. By Carroll L. V. Weeks</i>	277
Specification, 1958. <i>Edited by F. R. S. Yorke and Penelope Whiting</i>	210
Triumph of Peace: A Study of the Whitehall Banqueting House. <i>By Per Palme</i>	209
Vanished City. <i>The. By Oliver Lawson Dick and Robert Carrier</i>	418
Work-Place for Learning. <i>By Lawrence B. Perkins</i>	210
Wyatt, James. <i>By Anthony Dale</i>	347
Boys' Club, London, Stamford Hill. <i>Architects: John and Sylvia Reid. Interior views</i>	337
Bromley, Furniture Shop. <i>Architect: Bertram Carter. Exterior, interior views and plan</i>	273 275
Camberley, Surrey, Factory. <i>Architect: John Bickerdike. Exterior view and plan</i>	200
Cambridge, Flats and Houses. <i>Architect: Eric Lyons. Drawing and plans</i>	74-75
Cambridge, Offices. <i>Architect: H. H. Powell (Chief Architect, Eastern Region, British Railways). Exterior, interior views and plan</i>	343-344

	PAGE		PAGE		PAGE
Factories:		Hatfield New Town, Houses, Maisonnets and Flats. <i>Architects:</i> Stillman and Eastwick-Field. Drawing and plans	74	Housing, Hatfield New Town. <i>Architects:</i> Stillman and Eastwick-Field. Drawing and plans	74
Camberley, Surrey. <i>Architect:</i> John Bickerdike. Exterior view and plan	200	Hayes, Kent, Sports Pavilion. <i>Architects:</i> Pite, Son and Fairweather. Exterior view and plan	345	Hubs Without Wheels: Town Centres of Harlow and Vällingby, Sweden. Illustrated article	373-392
Harmondsworth, Middlesex, for Technicolor Ltd. <i>Architects:</i> Wycliffe, Noble and Partners. Exterior, interior views and plan	174-181	Hayes, Middlesex, Civic Buildings. <i>Architect:</i> Clifford Culpin. Model and plans	12	Hull, House. <i>Architect:</i> Alexander Potter. Interior and exterior views	147
Wokingham. <i>Architects:</i> Yorke, Rosenberg and Mardall. Model and plan	50-51	Hi-Fi. <i>Illustrated note by Philip Hickson</i>	283-284	Ideal Interiors (Furnishing). Illustrated note	207-208
Farnborough, Hampshire, Laboratories. <i>Architects:</i> Ministry of Works. Exterior views and plan	129-130	Hinkley Point, Atomic Power Station. <i>Architect:</i> Frederick Gibberd. Models and plan	64-65	Industry, The:	
Fatchpur Sikri. <i>Illustrated article by Jacqueline Tyrwhitt</i>	124-128	History: Shutters, Blinds and Umbrellas. <i>Illustrated article by Howard Dearstyne</i>	420-422	Aluminium Sash. Illustrated note	362
Flats:		Hospitals:		Ascot on the Se-Duct. Illustrated note	288
Birmingham. <i>Architect:</i> A. G. Sheppard Fidler (City Architect). Drawing and plan	76	Alderney, Maternity. <i>Architect:</i> Richard Llewelyn Davies. Models and plan	46-47	Asphalt Handbook. Note	360
Cambridge. <i>Architect:</i> Eric Lyons. Drawing and plans	74-75	Doncaster, General. <i>Architects:</i> Pite, Son and Fairweather. Model and plan	42-44	Conspectus of Sanitary Ware. Illustrated note	222
London, Isle of Dogs. <i>Architects:</i> Louis de Soissons, Peacock, Hodges and Robertson. Drawing and plan	76	Durham. <i>Architects:</i> S. W. Milburn and Partners. Drawing and plan	47	Curtain Walling Handbook. Note	428
London, Piccadilly. <i>Architects:</i> John and Sylvia Reid. Interior views and plan	335-336	Harlow, General. <i>Architects:</i> Easton and Robertson. Models and plan	44-45	Economy Copper Roofing. Illustrated note	290
London, Wandsworth, West Hill. <i>Architect:</i> Clifford Culpin. Model, drawing and plans	72-74	Kettering, General. <i>Architects:</i> Gollins, Melvin, Ward and Partners. Models and plan	42-43	Flexible Structures. Note	154
Frederick's Place (An Adam Miscellany). <i>Illustrated note by M. J. Chandler</i>	108-109	Wythenshawe, Manchester, General. <i>Architects:</i> Powell and Moya. Model, drawings and plans	44-46	Give Rock a Bad Name (Glamorock Surface Rendering). Note	288
Functional Tradition: On the Railways. Illustrated note	137-140	Hostels:		Glass Cladding. Note	288
Furnishing: Fitness for Person (St. Mary's Church, Whitby). <i>Illustrated note by Kenneth Rowntree</i>	136	Cranfield College of Aeronautics. <i>Architects:</i> Stillman and Eastwick-Field. Model and plan	56-57	How To Use Our Products (Booklet Issued by Robertson Thain Ltd.). Note	154
Furnishing: Ideal Interiors (Ideal Home Exhibition). Illustrated note	207-208	Leicester University, Women's. <i>Architects:</i> J. L. Martin and Trevor Dunnatt. Models and plan	56-57	Infill Panels. Note	288
Furniture Exhibition, 1958 (Design Review). Illustrated note	215	Warsash, Hampshire, for School of Navigation. <i>Architects:</i> Richard Sheppard and Partners. Models and plan	58-59	Kitchen Fittings. Illustrated note	222
Furniture: Ponti Chair in England (Design Review). Illustrated note	149	Hotel, Edinburgh, Caledonian, Chandelier. <i>Designers:</i> Robert and Roger Nicholson. Interior view and plan	399-400	Letters Carved in Slate. Illustrated note	290
Furniture: Race Auditorium Seating (Design Review). Illustrated note	149	Hotel, London, Park Lane, Extension to Grosvenor House. <i>Designers:</i> R. D. Russell and Partners. Interior views	213-215	Lightweight Roofing. Illustrated note	222
Gatwick Airport Terminal Buildings. Architects: Yorke, Rosenberg and Mardall. Models and plan	48-49	House in Highgate (Techniques). <i>Illustrated note by Lance Wright</i>	353-354	Marley Pantechnicon, The (Catalogue of Products). Note	428
Geometry of Shade (Techniques). <i>Illustrated article by Michael Brawne</i>	424-428	Houses:		Melamine, A New Delicacy in (Patterned Designs in Waverite). Illustrated note	430
Georgian Sculptors:		Cambridge. <i>Architect:</i> Eric Lyons. Drawing and plans	74-75	Plumber's Hardware Described. Note	360
Architect and Sculptor. <i>Illustrated article by M. I. Webb</i>	329-331	Cowes, Isle of Wight. <i>Architects:</i> James Stirling and James Gowan. Exterior, interior views, drawings and plans	256-260	Precasting, Development in. Illustrated note	428
Carters, The. <i>Illustrated note by Rupert Gunnis</i>	334	Hull. <i>Architect:</i> Alexander Potter. Interior and exterior views	147	Quarry Directory. Note	360
Victor Alexander Sederbach. <i>Illustrated note by Nikolaus Pevsner</i>	332-334	London, Highgate. <i>Architect:</i> Erhard Lorenz. Exterior, interior views and plans	324-328, 353-354	Space Frames off the Peg. Illustrated note	360
Glass Cladding (The Industry). Note	288	London, Wandsworth, West Hill. <i>Architect:</i> Clifford Culpin. Model, drawing and plans	72-74	Spray Basin. Illustrated note	288
Gravesend, Girls' Secondary School. <i>Architect:</i> Elie Mayoreas. Drawing and plan	68-69	Nacton, Suffolk. <i>Architects:</i> Sandon and Harding. Exterior views and plan	346	Textured Concrete. Illustrated note	288
Halls of Residence, London, South Kensington, for Imperial College. Architects: Richard Sheppard and Partners. Model and plan	58-59	Newstead Abbey, Nottinghamshire. <i>Architects:</i> Bartlett and Gray. Exterior views and plan	415-416	Vinyl Handrails. Illustrated note	290
Handrails, Vinyl (The Industry). Illustrated note	290	Sheffield. <i>Architects:</i> Geoffrey and June Holroyd. Exterior, interior views and plan	276	Weatherstripped Window, A New. Illustrated note	154
Harlesden, Laboratories and Offices for H. J. Heinz Company. <i>Architects:</i> J. Douglass Mathews and Partners. Models and plan	54-55	West Wittering, Sussex. <i>Architects:</i> Wells Coates and Michael Lyell. Exterior, interior views and plan	189-191	Wimpey Builds (Record of Building Work). Note	360
Harlow, General Hospital. <i>Architects:</i> Easton and Robertson. Models and plan	44-45			Interior Design:	
Harlow Town Centre. <i>Illustrated article by Frederick Gibberd</i>	381-392			Bank in Queen Victoria Street, E.C.4. <i>Architect:</i> John Wright. Exterior, interior views and drawings	263-268
Harmondsworth, Middlesex, Workshop for Technicolor Ltd. <i>Architects:</i> Wycliffe, Noble and Partners. Exterior, interior views and plan	174-181			Board Room in Vigo Street, W.1. <i>Architects:</i> John and Sylvia Reid. Interior views	336-337

	PAGE
Shoe Showrooms in Regent Street, W.I. <i>Designers:</i> Conran Contracts. Interior views and plan	401-402
Showrooms, Regent Street, W.I., for Thomas de la Rue. <i>Designers:</i> Design Research Unit. Exterior, interior views and plan	143-146
Studio in Athens. <i>Designer:</i> N. Hatzikyriakos-Ghika. Interior views	462-404
USAF Officers' Club, South Ruiship. <i>Designers:</i> Clive Hunt and Edwin Meayers (Heal's Contracts). Interior views	146-147
Window Showrooms, High Holborn. <i>Architects:</i> Bronck Katz and R. Vaughan. Interior views	146
Ipswich, College of Further Education. <i>Architects:</i> Johns, Slater and Haward. Model and plan	18-19
Kettering, General Hospital. <i>Architects:</i> Golins, Melvin, Ward and Partners. Models and plan	42-43
Kitchen Fittings (The Industry). Illustrated note	222
Laboratories:	
Amersham, for Atomic Energy Commission. <i>Architect:</i> Jefferiss Mathews. Model and plan	50-51
Farnborough, Hampshire. <i>Architects:</i> Ministry of Works. Exterior views and plan	129-130
Harlesden, for H. J. Heinz Company. <i>Architects:</i> J. Douglass Mathews and Partners. Models and plan	54-55
Rugby, Research. <i>Architects:</i> W. S. Hattrell and Partners. Model and plan	54-55
Sherborne, Dorset, School for Girls. <i>Architects:</i> Architects' Co-Partnership. Exterior views and plans	199
Lamond of Dundee. Illustrated article by David M. Walker	269-271
Le Havre, Church. <i>Architect:</i> Auguste Perret. Interior and exterior views	245
Leicester, University, Chemistry Building. <i>Architects:</i> Architects' Co-Partnership. Model and plan	28-29
Leicester University, Women's Hostel. <i>Architects:</i> J. L. Martin and Trevor Dannatt. Models and plan	56-57
Les Grés, France, Church of St. Agnes. <i>Architect:</i> Michel Marot. Exterior, interior views and plan	247
Lettering, Small Scale (Techniques). Illustrated article by John Sharp	149-152
Letters Carved in Slate (The Industry). Illustrated note	290
Lighting, Street (Techniques). Illustrated article by Peter Whitworth	216-220
Lille, Church of the Dominican Priory. <i>Architects:</i> Pierre Pinsard and Neil Hutchinson. Interior view	250
Liturgical Brief, A. Illustrated article by Peter Hammond	240-255
Liverpool University, Physics Building. <i>Architects:</i> Basil Spence and Partners. Model and plans	30-31
London:	
Albemarle Street, Offices. <i>Architect:</i> Ernő Goldfinger. Exterior, interior views and plans	118-123
Battersea, Warehouse and Offices. <i>Architects:</i> J. Austin-Smith and Partners. Drawing and plan	53
Beckton, Offices for Gas Works. <i>Architect:</i> Elie Mayoreas. Exterior, interior views and plans	410-413
Bethnal Green, Old People's Home. <i>Architect:</i> Hubert Bennett (Architect to London County Council). Model and plans	72-73

	PAGE
Bond Street, Booking Hall for Union Castle Line. <i>Architect:</i> Michael H. Egan. Interior views and plan	211-213
Bow Common, St. Paul's Church. <i>Architect:</i> Robert Maguire. Drawing and plan	255
Farringdon Street, Telephone Exchange. <i>Architects:</i> Ministry of Works. Drawing and plan	8-9
High Holborn, Window Showrooms. <i>Architects:</i> Bronck Katz and R. Vaughan. Interior views	146
Highgate, House. <i>Architect:</i> Erhard Lorenz. Exterior, interior views and plans	324-328, 353-354
Isle of Dogs, Flats and Maisonnets. <i>Architects:</i> Louis de Soissons, Peacock, Hodges and Robertson. Drawing and plan	76
Lewisham, Primary School. <i>Architect:</i> Peter Moro. Exterior, interior views and plans	306-310
London Wall, E.C.2, Offices. <i>Architect:</i> R. N. Wakelin. Exterior views and plan	198
Lower Thames Street, E.C.3, Shipping Offices. <i>Architect:</i> Brian O'Rourke. Drawing and plan	36-37
Mayfair, W.I., Offices. <i>Architects:</i> Bridgwater and Shephard. Drawing and plan	41
Notting Hill Gate, Improvement Scheme (Streetscape with Furniture). Illustrated article by Kenneth Browne	312-313
Park Lane, Grosvenor House Extension. <i>Designers:</i> R. D. Russell and Partners. Interior views	213-215
Piccadilly, Flat. <i>Architects:</i> John and Sylvia Reid. Interior views and plan	335-336
Piccadilly, Offices. <i>Architect:</i> Ernő Goldfinger. Drawing and plan	41
Queen Victoria Street, Bank of London and South America. <i>Architect:</i> John Wright. Exterior, interior views and drawings	263-268
Regent Street, Shoe Showrooms. <i>Designers:</i> Conran Contracts. Interior views and plan	401-402
Regent Street, Showrooms for Thomas de la Rue. <i>Designers:</i> Design Research Unit. Exterior, interior views and plan	143-146
Rochampton, Special School for Delicate Children. <i>Architects:</i> James Cubitt and Partners. Model and plan	70-71
St. John's Wood, Synagogue. <i>Architects:</i> T. P. Bennett and Son. Model and plan	27
Southampton Row, Extension to School of Arts and Crafts. <i>Architect:</i> Hubert Bennett (London County Council Architect). Models, drawings and plans	21-23
South Kensington, Halls of Residence for Imperial College. <i>Architects:</i> Richard Sheppard and Partners. Model and plan	58-59
South Kensington, Science Building for Imperial College. <i>Architects:</i> Norman and Dawbarn. Models and plan	22-24
Southwark, Girls' Comprehensive School. <i>Architects:</i> Chamberlin, Powell and Bon. Models and plans	66-67
Stamford Hill, Boys' Club. <i>Architects:</i> John and Sylvia Reid. Interior views	337

	PAGE
Strand, Offices and Shops. <i>Architects:</i> Trehearne and Norman, Preston and Partners. Drawing and plan	36-37
Vigo Street, Board Room. <i>Architects:</i> John and Sylvia Reid. Interior views	336-337
Wandsworth, School. <i>Architect:</i> Sir Leslie Martin. Exterior, interior views and plans	302-305
Westminster Revisited (Townscape). Illustrated article by Gordon Cullen	405-409
Wood Street, Offices. <i>Architects:</i> T. P. Bennett and Son. Model and plan	38-39
Maidstone, Barclays Bank. <i>Architects:</i> William Holford and Partners. Model and plan	60-61
Maisonnets, London, Isle of Dogs. <i>Architects:</i> Louis de Soissons, Peacock, Hodges and Robertson. Drawing and plan	76
Man in a Hot Tin Box. Article by J. M. Richards	299-301
Manchester, Offices in St. Peter's Square. <i>Architect:</i> Arthur Bailey. Model and plan	38-39
Manchester, Government Offices. <i>Architects:</i> Ministry of Works. Drawing and plans	40
Mansfield, College of Further Education. <i>Architect:</i> D. E. E. Gibson (Nottinghamshire County Architect). Models and plan	20-21
Market, Sheffield, Wholesale. <i>Architects:</i> William Holford and Partners. Model and plan	60-61
Marley Pantechnicon, The (The Industry). Note	428
Mathematical Models (Objects Re-Interpreted). Illustrated note	349-350
Maxburg, Munich, The (Townscape). Illustrated note by Michel Santiago	298, 350-351
Melamine, A New Delicacy in (The Industry). Illustrated note	430
Mexico City, Theatre. <i>Architect:</i> Alejandro Prieto. Exterior, interior views and plans	110-113
Middlesbrough, Little Theatre. <i>Architect:</i> Enrico de Piero. Exterior, interior views and plan	272-273
Midhurst, Roman Catholic Church. <i>Architects:</i> Guy Morgan and Partners. Drawing and plan	26
Milan, Church of the Madonna of the Poor near. <i>Architects:</i> Figini and Pollini. Interior view	253
Milford Haven. Illustrated article by Ian Nairn	182-188
Mixer, Braun (Design Review). Illustrated note	148
Morsang-sur-Orge, France, Church of Notre Dame de Grace. <i>Architect:</i> Robert Faraut. Interior views	248, 254
Motor-Car, The Problem of the (Man in a Hot Tin Box). Article by J. M. Richards	299-301
Munich, The Maxburg (Townscape). Illustrated note by M. Santiago	298, 350-351
Naeton, Suffolk, House. <i>Architects:</i> Sandon and Harding. Exterior views and plan	346
Neighbourhood Centre, Swindon. <i>Architect:</i> Frederick Gibberd. Model and plan	14-16
Newcastle, Physics Building for Durham University. <i>Architects:</i> Basil Spence and Partners. Model and plans	28-29
Newport Pagnell, Offices for Société Genevoise Ltd. <i>Architects:</i> Gordon and Ursula Bowyer. Exterior, interior views and plans	232-235

	PAGE		PAGE		PAGE
Newstead Abbey, Nottinghamshire, House. <i>Architects:</i> Bartlett and Gray. Exterior views and plan	415-416	Oxford University, Metallurgy Building. <i>Architect:</i> Basil Ward. Drawing and plan	32	Sailing Club, Beadnell, Northumberland. <i>Architects:</i> Ryder and Yates. Exterior views and plan	416
Nottingham, Offices and Warehouse. <i>Architects:</i> J. M. Austin-Smith and Partners. Exterior views and plan	130-131	Padiham, Lancashire, Coal-Fired Power Station. <i>Architects:</i> Cruikshank and Seward. Drawing and plan	64	Sanitary Ware, Conspectus of (The Industry). Illustrated note	222
Objects Re-Interpreted (Mathematical Models at Harvard). Illustrated note	349-350	Palazzetto dello Sport, Rome. <i>Designers:</i> Pier Luigi Nervi and Annibale Vitellozzi. Illustrated note by Michel Santiago	140-141	Scarborough, Technical College. <i>Architects:</i> Gollins, Melvin, Ward and Partners. Models and plan	18-20
Offices:		Panels, Infill (The Industry). Note	288	School of Arts and Crafts, London, Southampton Row, Extension to. <i>Architect:</i> Hubert Bennett (London County Council Architect). Models, drawing and plans	21-23
Basildon New Town. <i>Architect:</i> Noel Tweddell (Chief Architect, Basildon Development Corporation). Drawing and plan	11	Pithead Baths, Dudley, Northumberland. <i>Architects:</i> Richard Sheppard and Partners. Exterior view and plan	345	Schools:	
Bexleyheath, for London Electricity Board. <i>Architect:</i> Arthur Bailey. Drawing and plan	52	Plate-Glass Shop Front, The. Illustrated article by Mary Eldridge	192-195	Arnold, Nottinghamshire, Grammar. <i>Architects:</i> Ministry of Education. Drawing and plan	69
Birmingham, for Engineering and Allied Employers' Association. <i>Architect:</i> John Madin. Exterior, interior views and plans	236-239	Plumbers' Hardware Described (The Industry). Note	360	Chelmsford, for Mentally-Handicapped Children. <i>Architect:</i> H. Conolly (Essex County Architect). Model and plan	68
Cambridge. <i>Architect:</i> H. H. Powell (Chief Architect, Eastern Region, British Railways). Exterior, interior views and plan	343-344	Poole, Old (Counter-Attack). Illustrated note by Gordon Cullen	77-78	Coventry, Binley, Comprehensive Secondary. <i>Architect:</i> Arthur Ling (City Architect). Model and plan	70-71
Crawley, Builders'. <i>Architects:</i> Edward D. Mills and Partners. Model and plan	38-40	Portraits:		Gravesend, Girls' Secondary. <i>Architect:</i> Elie Mayorcas. Drawing and plan	68-69
Harlesden, for H. J. Heinz Company. <i>Architects:</i> J. Douglass Mathews and Partners. Models and plan	54-55	Berkeley, Bishop	93	London, Lewisham, Primary. <i>Architect:</i> Peter Moro. Exterior, interior views and plans	306-310
Manchester, Government. <i>Architects:</i> Ministry of Works. Drawing and plans	40	Rumford, Count	163	London, Rochampton, Special. <i>Architects:</i> James Cubitt and Partners. Model and plan	70-71
Manchester, St. Peter's Square. <i>Architect:</i> Arthur Bailey. Model and plan	38-39	Power Stations:		London, Southwark Girls' Comprehensive. <i>Architects:</i> Chamberlin, Powell and Bon. Models and plans	66-67
Newport Pagnell, for Société Genevoise Ltd. <i>Architects:</i> Gordon and Ursula Bowyer. Exterior, interior views and plans	232-235	Cashlie, Perthshire, Hydro-Electric. <i>Architects:</i> Robert Matthew and Johnson-Marshall. Model and plans	63	London, Wandsworth. <i>Architect:</i> Sir Leslie Martin. Exterior, interior views and plans	302-305
Nottingham. <i>Architects:</i> J. M. Austin-Smith and Partners. Exterior views and plan	130-131	Hinkley Point, Atomic. <i>Architect:</i> Frederick Gibberd. Models and plan	64-65	Sherborne, Dorset, Laboratories. <i>Architects:</i> Architects' Co-Partnership. Exterior views and plans	199
Rheinhausen, Germany. <i>Architects:</i> Hentrich and Petschnigg. Exterior views and plan	196	Padiham, Lancashire, Coal-Fired. <i>Architects:</i> Cruikshank and Seward. Drawing and plan	64	Southgate, Middlesex, Grammar. <i>Architects:</i> Raglan Squire and Partners. Model and plan	66-67
Offices in London:		Precasting, Development in (The Industry). Illustrated note	128	Stevenage, Infants'. <i>Architects:</i> James Cubitt and Partners. Exterior views and plan	310-311
Albemarle Street. <i>Architect:</i> Ernő Goldfinger. Exterior, interior views and plans	118-123	Preview: Special Issue	4-76	Tadcaster, Yorkshire, Comprehensive Secondary. <i>Architect:</i> A. W. Glover (West Riding County Architect). Drawing and plan	67-68
Battersea. <i>Architects:</i> J. M. Austin-Smith and Partners. Drawing and plan	53	Public House, Coventry, Tile Hill. <i>Architects:</i> W. S. Hattrell and Partners. Model and plan	62	Wadebridge, Cornwall, Secondary. <i>Architect:</i> F. K. Hicklin (County Architect). Exterior, interior views and plan	413-414
Beckton, for Gas Works. <i>Architect:</i> Elie Mayorcas. Exterior, interior views and plans	410-413	Public House, Crawley New Town. <i>Architects:</i> Musman and Cousens. Exterior, interior views and plan	132	Witney, Oxfordshire, R.C. Primary. <i>Architects:</i> Booth, Ledebor and Pinckhard. Model and plan	70-71
London Wall, E.C.2. <i>Architect:</i> R. N. Wakelin. Exterior views and plan	198	Quarry Directory, The (The Industry). Note	360	Schools, 19th Century Board (Towers of Learning). Illustrated article by David Gregory-Jones	393-398
Lower Thames Street, E.C.3. <i>Architect:</i> Brian O'Rourke. Drawing and plan	36-37	Railways, On the (Functional Tradition). Illustrated note	137-140	Sculptors, Georgian:	
Mayfair, W.1. <i>Architects:</i> Bridgwater and Shephard. Drawing and plan	41	Rheinhausen, Germany, Offices. <i>Architects:</i> Hentrich and Petschnigg. Exterior views and plan	196	Architect and Sculptor. Illustrated article by M. I. Webb	329-331
Piccadilly, W.1. <i>Architect:</i> Ernő Goldfinger. Drawing and plan	41	Road Improvements (Counter-Attack). Illustrated note by Ian Nairn	79-80	Carters, The. Illustrated note by Rupert Gunnis	334
Strand. <i>Architects:</i> Trehearne and Norman, Preston and Partners. Drawing and plan	36-37	Rome, Palazzetto dello Sport. <i>Designers:</i> Pier Luigi Nervi and Annibale Vitellozzi. Illustrated note by Michel Santiago	140-141	Victor Alexander Sederbach. Illustrated note by Nikolaus Pevsner	332-334
Wood Street. <i>Architects:</i> T. P. Bennett and Son. Model and plan	38-39	Ronchamp, France, Chapel of Notre Dame du Haut. <i>Architect:</i> Le Corbusier. Interior view	249	Seating, Race Auditorium (Design Review). Illustrated note	149
Old People's Home, London, Bethnal Green. <i>Architect:</i> Hubert Bennett (London County Council Architect). Model and plans	72-73	Roof, An Early 14th Century. Illustrated article by J. Quentin Hughes	340-342	Sewing Machine, Neechi (Design Review). Illustrated note	148
Old People's Housing, Crawley. <i>Architects:</i> J. M. Austin-Smith and Partners. Drawing and plan	75	Roofing, Economy Copper (The Industry). Illustrated note	290	Sheffield, House. <i>Architects:</i> Geoffrey and June Holroyd. Exterior, interior views and plan	276
Osterley Park, The Transparent Portico at (An Adam Miscellany). Illustrated note by John Harris	108-109	Roofing, Lightweight (The Industry). Illustrated note	222	Sheffield, Wholesale Market. <i>Architects:</i> William Holford and Partners. Model and plan	60-61
		Roths, Fifeshire, Colliery. <i>Architect:</i> Egon Riss. Exterior, interior views and plan	164-169	Sherborne, Dorset, Laboratories, School for Girls. <i>Architects:</i> Architects' Co-Partnership. Exterior views and plans	199
		Rubery, near Birmingham, Church. <i>Architects:</i> Lavender, Twentyman and Percy. Drawing and plan	26		
		Rugby, Research Laboratories. <i>Architects:</i> W. S. Hattrell and Partners. Model and plan	54-55		
		Rumford, Count. Illustrated article by W. J. Sparrow	161-163		
		Saarbrücken, Germany, Church of St. Albert. <i>Architect:</i> Gottfried Bohm. Interior view and plan	246		
		Saarbrücken, Germany, Church of St. Maurice. <i>Architect:</i> August Dietz. Interior view	248		

	PAGE
Ship Interior: M.S. Prinsesse Margrethe. <i>Architect: Kay Korbning. Interior views</i>	338-339
Shop, Bromley, Dunn's Furniture. <i>Architect: Bertram Carter. Exterior, interior views and plan</i>	273-275
Shop Front, The Plate Glass. <i>Illustrated article by Mary Eldridge</i>	192-195
Shopping Precinct, Coventry. <i>Architect: Arthur Ling (City Architect). Drawings and plan</i>	16-18
Shops, Basildon New Town. <i>Architect: Noel Tweddell (Chief Architect, New Town Corporation). Drawing and plan</i>	11
Showrooms:	
London, High Holborn, Window. <i>Architects: Bronck Katz and R. Vaughan. Interior views</i>	146
London, Regent Street, for Thomas de la Rue. <i>Designers: Design Research Unit. Exterior, interior views and plan</i>	143-146
London, Regent Street, Shoe. <i>Designers: Conran Contracts. Interior views and plan</i>	401-402
Staines, Motor. <i>Architects: Westwood, Sons and Partners. Drawing and plan</i>	62
Shutters, Blinds and Umbrellas (History). <i>Illustrated article by Howard Dearstyne</i>	420-422
Skill: Review of Building Techniques and Industrial Design 143-156, 211-222, 283-292, 353-362, 424-432	
Southgate, Middlesex, Grammar School. <i>Architects: Raglan Squire and Partners. Model and plan</i>	66-67
Southgate, Technical College. <i>Architect: C. G. Stillman (Middlesex County Architect). Model and plan</i>	24-25
South Ruislip, USAF Officers' Club. <i>Designers: Clive Hunt and Edwin Meyers. (Heaf's Contracts). Interior views</i>	146-147
Space Frames Off the Peg (The Industry). <i>Illustrated note</i>	360
Spadatro, The Journey to (An Adam Miscellany). <i>Illustrated article by John Fleming</i>	102-107
Sports Palace, Rome. <i>Designers: Pier Luigi Nervi and Annibale Vitellozzi. Illustrated note by Michel Santiago</i>	140-141
Sports Pavilion, Hayes, Kent. <i>Architects: Pite, Son and Fairweather. Exterior view and plan</i>	345
Staines, Motor Showrooms. <i>Architects: Westwood, Sons and Partners. Drawing and plan</i>	62
Steel Structures, Flexible (The Industry). <i>Note</i>	154
Stevenage New Town:	
Community Centre. <i>Architects: L. G. Vincent (Development Corporation Architect). Exterior view and plan</i>	197
Infants' School. <i>Architects: James Cubitt and Partners. Exterior views and plan</i>	310-311
Town Centre. <i>Architect: L. G. Vincent. Models, sketch and plan</i>	13-15
Stores, Bexleyheath, for London Electricity Board. <i>Architect: Arthur Bailey. Drawing and plan</i>	52
Street Lighting (Techniques). <i>Illustrated article by Peter Whitworth</i>	216-220
Streetscape with Furniture: The Attack on the Corridor Street at Notting Hill Gate (Townscape). <i>Illustrated article by Kenneth Browne</i>	312-323
Suarce, near Belfort, Proposed Church. <i>Architects: Dumas, Dumas and Wecker. Model and plan</i>	247

	PAGE
Sun Control: Geometry of Shade. <i>Illustrated article by Michael Brawne</i>	424-428
Sun Control: Shutters, Blinds and Umbrellas (History). <i>Illustrated article by Howard Dearstyne</i>	420-422
Supplies Depot, Chelmsford. <i>Architect: H. Conolly (Essex County Architect). Drawing and plan</i>	52
Surface Rendering, Glamorock (The Industry). <i>Note</i>	288
Swindon, Neighbourhood Centre. <i>Architect: Frederick Gibberd. Model and plan</i>	14-16
Synagogue, London, St. John's Wood. <i>Architects: T. P. Bennett and Son. Model and plan</i>	27
Tadcaster, Yorkshire, Comprehensive Secondary School. <i>Architect: A. W. Glover (West Riding County Architect). Drawing and plan</i>	67-68
Technical College, Scarborough. <i>Architects: Gollins, Melvin, Ward and Partners. Models and plan</i>	18-21
Technical College, Southgate. <i>Architect: C. G. Stillman (Middlesex County Architect). Model and plan</i>	24-25
Techniques:	
Geometry of Shade. <i>Illustrated article by Michael Brawne</i>	424-428
House in Highgate. <i>Illustrated note by Lance Wright</i>	353-354
Small Scale Lettering. <i>Illustrated article by John Sharp</i>	149-152
Street Lighting. <i>Illustrated article by Peter Whitworth</i>	216-220
Telephone Exchange, London, Farringdon Street. <i>Architects: Ministry of Works. Drawing and plan</i>	8-9
Textured Concrete (The Industry). <i>Illustrated note</i>	288
Thayngen, Switzerland, Church. <i>Architect: Josef Schutz. Interior view</i>	251
Theatre, Mexico City. <i>Architect: Alejandro Prieto. Exterior, interior views and plans</i>	110-113
Theatre, Middlesbrough, Little. <i>Architect: Enrico de Pierro. Exterior, interior views and plan</i>	272-273
Towers of Learning (19th Century Board Schools). <i>Illustrated article by David Gregory-Jones</i>	393-398
Town Centres:	
Harlow. <i>Illustrated article by Frederick Gibberd</i>	381-392
Stevenage. <i>Architect: L. G. Vincent (Chief Architect, Development Corporation). Models, sketch and plan</i>	13-15
Vallingby, Sweden. <i>Illustrated article</i>	373-380
Townscape:	
Downtown America. <i>Illustrated note</i>	279-280
Escaped Lions. <i>Illustrated article by Raymond Spurrier</i>	205-206
Maxburg, Munich, The. <i>Illustrated note by M. Santiago</i>	298, 350-351
Streetscape with Furniture: The Attack on the Corridor Street at Notting Hill Gate. <i>Illustrated article by Kenneth Browne</i>	312-323
Trowbridge. <i>Illustrated article by Gordon Cullen</i>	114-117
Westminster Revisited. <i>Illustrated article by Gordon Cullen</i>	405-409
Transparent Portico, The (An Adam Miscellany). <i>Illustrated note by John Harris</i>	108-109
Travel: African Texture. <i>Illustrated note by Arthur M. Foyle</i>	351-352
Travel Office, London, Bond Street, for Union Castle Line. <i>Architect: Michael H. Egan. Interior views and plan</i>	211-213

	PAGE
Tridon. <i>Article by Reyner Banham</i>	229-231
Trowbridge (Townscape). <i>Illustrated article by Gordon Cullen</i>	114-117
Universities:	
Birmingham, Chemistry Building. <i>Architects: Playne and Lacey. Models and plans</i>	34-35
Dumdee, Library and Hall for Queen's College. <i>Architects: Robert Matthew and Johnson-Marshall. Model and plan</i>	32-33
Durham, Physics Building at Newcastle for. <i>Architects: Basil Spence and Partners. Model and plan</i>	28-29
Durham, Science Building. <i>Architects: Easton and Robertson. Model and plan</i>	31-33
Leicester, Chemistry Building. <i>Architects: Architects' Co-Partnership. Model and plan</i>	28-29
Leicester, Women's Hostel. <i>Architects: J. L. Martin and Trevor Dannatt. Models and plan</i>	56-57
Liverpool, Physics Building. <i>Architects: Basil Spence and Partners. Models and plans</i>	30-31
Oxford, Metallurgy Building. <i>Architect: Basil Ward. Drawing and plan</i>	32
Vallingby, Sweden, Town Centre. <i>Illustrated article</i>	373-380
Wadebridge, Cornwall, Secondary School. <i>Architect: F. K. Hicklin (County Architect). Exterior, interior views and plan</i>	413-414
Warehouse, London, Battersea. <i>Architects: J. M. Austin-Smith and Partners. Drawing and plan</i>	53
Warehouse, Nottingham. <i>Architects: J. M. Austin-Smith and Partners. Exterior views and plan</i>	130-131
Warsash, Hampshire, Hostel for School of Navigation. <i>Architects: Richard Sheppard and Partners. Models and plan</i>	58-59
Washbasin, Spray (The Industry). <i>Illustrated note</i>	288
Welwyn, College of Further Education. <i>Architects: Louis de Soissons, Peacock, Hodges and Robertson. Drawing and plan</i>	25
Westminster Revisited (Townscape). <i>Illustrated article by Gordon Cullen</i>	405-409
West Wittering, Sussex, House. <i>Architects: Wells Coates and Michael Lyell. Exterior, interior views and plan</i>	189-191
Whitby, St. Mary's Church (Furnishing). <i>Illustrated note by Kenneth Rowntree</i>	136
Wimpey Builds (The Industry). <i>Note</i>	360
Window, A New Weatherstripped (The Industry). <i>Illustrated note</i>	154
Witney, Oxfordshire, R.C. Primary School. <i>Architects: Booth, Ledeboer and Pinckheard. Model and plan</i>	70-71
Wokingham, Factory. <i>Architects: Yorke, Rosenberg and Mardall. Model and plan</i>	50-51
Workshop, Harmondsworth, Middlesex, for Technicolor Ltd. <i>Architects: Wycliffe, Noble and Partners. Exterior, interior views and plan</i>	174-181
Wythenshawe, Manchester, General Hospital. <i>Architects: Powell and Moya. Model, drawings and plans</i>	44-46
York Minster, Chapter House. (An Early 14th Century Roof). <i>Illustrated article by J. Quentin Hughes</i>	340-342
Zurich, Bullinger Church. <i>Architects: Pfister Brothers. Interior view</i>	250

ARCHITECTS AND ARTISTS

	PAGE
Aalto, Alvar	366
Adam Brothers, The	102-109
Ahlgren, Magnus	377
Andrews, Michael	204
Architects' Co-Partnership	28-29, 199
Austin-Smith, J. and Partners	130-131, 53, 75
Backstrom and Reinius	377
Bailey, Arthur	38-39, 52
Baldacchini, Cesar	135
Bartlett and Gray	415-416
Baur, Hermann	251, 254
Beaton, Cecil	207
Bedford, Eric	389
Bennett, Hubert	21-23, 72-73
Bennett, T. P. and Son	27, 38-39
Bernardes, Sergio and Rolf Huther	1
Bickerdike, John	260
Björström, Jarl	379, 380
Blake, Peter	278
Bohm, Gottfried	246
Booth, Ledeboer and Pinckheard	70-71
Bowyer, Gordon and Ursula	232-235
Bridgwater and Shephard	41
Buffet, Bernard	419
Campbell-Jones and Sons	4
Candia, Salvador, Plinio Croce and R. C. Atlalo	255
Carpanelli, Franco	226
Carter, Bertram	273-275
Carter, Thomas	334
Casson, Sir Hugh	207
Cavalieri, Giorgio	365
Challen and Floyd	216
Chamberlin, Powell and Bon	66-67
Champneys, Basil	394
Coates, Wells and Michael Lyell	189-191
Collins, Henry and Joyce	235
Colquhoun, Robert	419
Conolly, H.	52, 68
Conran Contracts	401-402
Cotton, Ballard and Blow	4
Cubitt, James and Partners	70-71, 310-311
Culpin, Clifford	12, 72-74
Cruikshank and Seward	64
Dannatt, Trevor and J. L. Martin	56-57
D'Arcy Cathcart and Son	87
Davies, Richard Llewelyn	46-47
Day, Robin	207
DeLaunay, Robert	279
de Pierro, Enrico	272-273
Design Research Unit	143-146
de Soissons, Louis, Peacock, Hodges and Robertson	26, 76
Dietz, August	248
Dubuffet, Jean	420
Dumas, Dumas and Wecker	247
Earl, Harley	208
Easton and Robertson	31-33, 44-45
Egan, Michael H.	211-213
Faraud, Robert	248, 254
Fidler, A. G. Sheppard	76, 275
Figini and Pollini	253
Fischli, Hans	365
Franklin, Ben	87
Freud, Lucian	419
Gibberd, Frederick	14-16, 64-65, 381-392
Gibson, D. E. E.	20-21
Glover, A. W.	67-68
Goldfinger, Ernő	41, 118-123
Gollins, Melvin, Ward and Partners	18-21, 42-43
Gotch, Christopher	347
Gowan, James and James Stirling	256-260
Gris, Juan	348
Hamilton, Richard	208
Hattrell, W. S. and Partners	54-55, 62
Hatzikyriakos-Ghika, N.	402-404
Hentrich and Petschnigg	196
Hicklin, F. K.	413-414
Hilton, Roger	349
Holford, Sir William and Partners	60-61
Holroyd, Geoffrey and June	276
Howitt, W. Fowler	88

	PAGE
Hunt, Clive and Edwin Meayers	146-147
Hutchinson, Neil and Pierre Pinsard	250
Huther, Rolf and Sergio Bernardes	1
Jeeves, Gordon	213-215
Johns, Slater and Howard	18-19
Kandinsky, Wassily	279
Katz, Bronck and Vaughan	146
Ketchum, Gina and Sharp	225
King, Vincent	225
Kline, Franz	420
Kongeter, Wilhelm	240
Korbing, Kay	338-339
Lamond, W. G.	269-271
Lanners and Wahlen	158
Larianov, Michel	204
Lavender, Twentymen and Percy	26
Le Corbusier	249
Lee, Terry	135
Ling, Arthur	16-18, 70-71
Lodz, Marcel	248
Lorenz, Erhard	324-328, 353-354
Lundy, Victor	295
Lyell, Michael and Wells Coates	189-191
Lyons, Eric	74-75
Madin, John	236-239
Maguire, Robert	255
Marcoussis, Louis	204
Marot, Michel	247
Martin, Sir Leslie	302-305
Martin, J. L. and Trevor Dannatt	56-57
Mathews, J. Douglass and Partners	54-55
Mathews, Jefferiss	50-51
Matthew, Robert and Johnson-Marshall	32-33, 63
Mayoreas, Elie	68-69, 410-413
Meayers, Edwin and Clive	146-147
Middleditch, Edward	349
Mills, Edward and Partners	10, 38-40
Milburn, S. W. and Partners	47
Ministry of Education	69
Ministry of Works	8-9, 40, 129-130
Morgan, Guy and Partners	26
Moro, Peter	306-310
Musman and Cousens	132
Nelson, George and Company	365
Nervi, Pier Louis and Annibale Vitellozzi	140-141
Nicholson, Robert and Roger	399-400
Noble, Wycliffe and Partners	174-181
Norman and Dawbarn	22-24, 48-49, 157
O'Rourke, Brian	36-37
Pabst, Theo and Sep Ruf	298, 350-351
Pasmore, Victor	310
Patrick, Jo	207
Peri, Peter	419
Permeke, Constant	134
Perret, Auguste	245
Plister Brothers	250
Pinsard, Pierre and Neil Hutchinson	250
Piper, John	135
Pite, Son and Fairweather	42-44, 345
Playne and Lacey	34-35
Ponti, Gio	149
Potter, Alexander	147
Powell and Moya	44-46
Powell, H. H.	343-344
Prieto, Alejandro	110-113
Race, Ernest	149
Rainer, Roland	366
Raineri, Giuseppe	157
Reid, John and Sylvia	335-337
Reynolds, Alan	348
Riss, Egon	164-169
Rivera, Diego	110-113
Roberts, William	348
Robson, E. R.	393-398
Ruf, Sep and Theo Pabst	298, 350-351
Russell, R. D. and Partners	213-215
Ryder and Yates	416
Saarienen, Eero	157
Sandon and Harding	346
Schutz, Josef	251
Schwarz and Bernard	248
Schwarz, Rudolf	252

	PAGE
Sederbach, Victor Alexander	332-334
Sert, Jose Luis	295
Seymour, Harris and Partners	388
Shaw, Norman	395
Sheppard, Richard and Partners	58-59, 345
Siren, Kaija and Heikke	158
Smith, Jack	135
Smith, Whitney and Wayne Williams	87
Spence, Basil and Partners	28-29, 30-31, 94-101
Squire, Raglan and Partners	66-67
Stephenson, Sam	87
Stevenson, J. J.	394
Stillman, C. G.	24-25
Stillman and Eastwick-Field	56-57, 74
Stirling, James and James Gowan	256-260
Trehearne and Norman, Preston and Partners	36-37
Tweddell, Noel	11
Verney, John	310
Villanueva, Carlos Raul	1
Vincent, L. G.	13-15, 197
Vitellozzi, Annibale and Pier Luigi Nervi	140-141
Wakeford, Kenneth, Jerram and Harris	384, 388
Wakelin, R. N.	189
Ward, Basil	32
Watson and Coates	53
Westwood, Sons and Partners	10-11, 62
Williams, Wayne and Whitney Smith	87
Wolff, Dr. Heinz	226
Wright, John	263-268
Yorke, Rosenberg and Mardall	48-49, 50-51

AUTHORS AND CONTRIBUTORS

Banham, Reyner	210, 229-231
Barker, T. C.	107-108
Baurmann, Roswitha	369-372
Betjeman, John	277
Blee, Michael	201-203
Brawne, Michael	209, 424-428
Browne, Kenneth	312-323
Burton, Richard, John Donat and Paul Koralek	174-181
Carter, John	284-287
Chandler, M. J.	109
Colvin, Howard	209
Cullen, Gordon	77-78, 114-117, 405-409
Dearstyne, Howard	420-422
de Maré, Eric	417
Dinsmoor, William Bell	133
Donat, John, Richard Burton and Paul Koralek	174-181
Eldridge, Mary	192-195
Fleming, John	102-107
Foyle, Arthur M.	351-352
Gibberd, Frederick	381-392
Gregory-Jones, David	393-398
Gunnis, Rupert	334
Hammond, Peter	240-255
Harris, John	108-109
Hickson, Philip	283-284
Hughes, J. Quentin	340-342
Koralek, Paul, Richard Burton and John Donat	174-181
Leacroft, Richard	277
Melville, Robert	134, 204, 278, 348, 418
Metcalf, Priscilla	418
Nairn, Ian	79-80, 182, 188
Pevsner, Nikolaus	209, 332-334, 347, 417
Rendle, Timothy	347
Richards, J. M.	299-301
Rowntree, Kenneth	136
Santiago, Michel	143-141, 282, 350-351
Sharp, John	149-152, 354-358
Sparrow, W. J.	161-163
Spurrier, Raymond	205-206
Summerson, Sir John	347
Tyrwhitt, Jacqueline	124-128
Walker, David M.	269-271
Webb, M. I.	329-331
Whiffen, Marcus	91-93
Whitworth, Peter	216-220
Wright, Lance	353-354

a selection of **BOOKS** from **The Architectural Press catalogue • 1958**

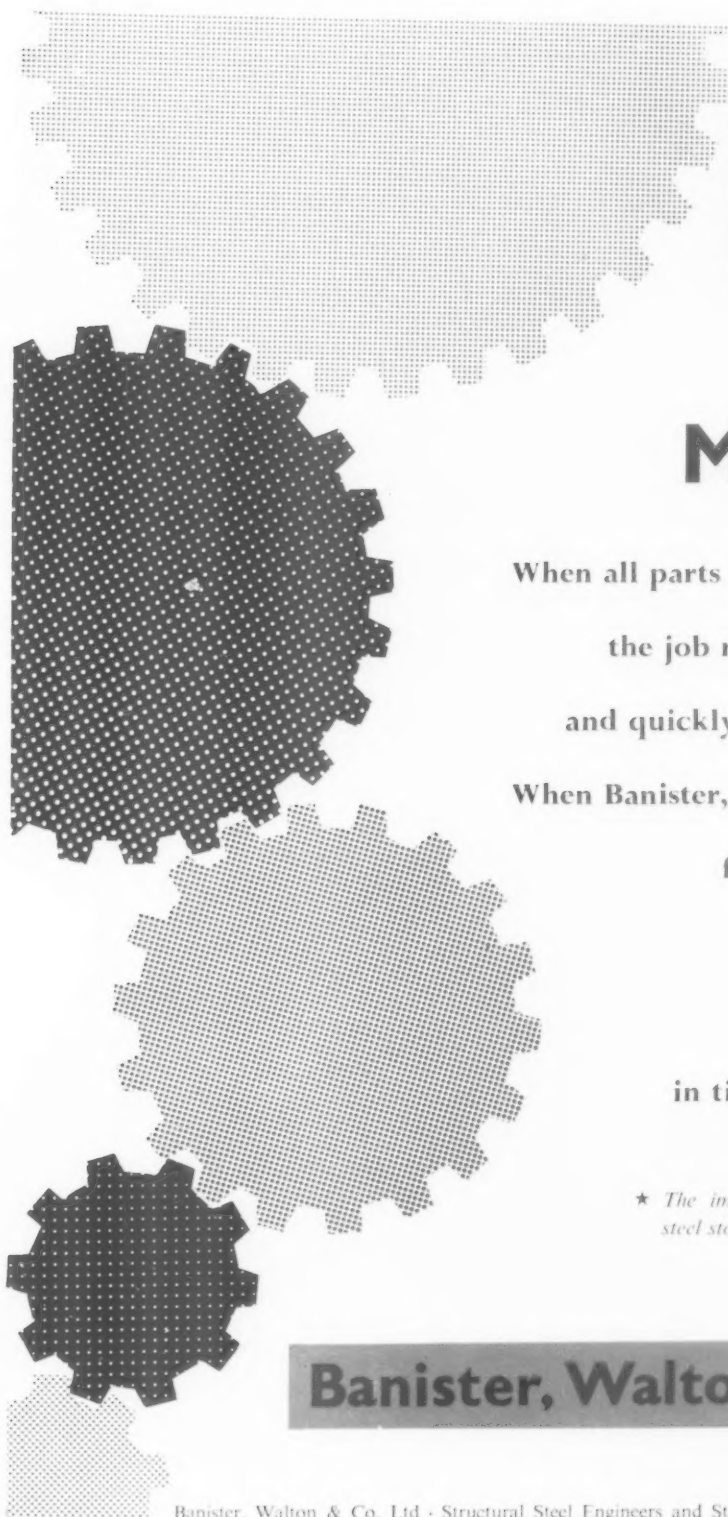
Acoustics in Modern Building Practice, by Fritz Ingerslev 35s. 0d.
The Adventure of Building, by Clough Williams-Ellis, illustrated by Geoffrey Robson 10s. 6d.
Architects' Working Details, Volumes 1, 2, 3, and 4, edited by D. A. C. A. Boyne and Lance Wright 25s. 0d. each volume. Volume 5, in preparation, also 25s. 0d.
The Architecture of Denmark, a symposium by seven contributors 12s. 6d.
The Architecture of England, by Frederick Gibberd 12s. 6d.
Building Elements, by R. Llewelyn Davies and D. J. Petty 37s. 6d.
Building Materials: Science and Practice, by Cecil C. Handyside 37s. 0d.
Buildings and Prospects, written and illustrated by John Piper 18s. 0d.
The Canals of England, by Eric de Maré 21s. 0d.
The Chapel at Ronchamp, by Le Corbusier 25s. 0d.
The City of London: A Record of Destruction and Survival, with a Report by Dr. C. H. Holden and Sir William Holford 25s. 0d.
Concerning Town Planning, by Le Corbusier, translated by Clive Entwistle 10s. 6d.
Counter-Attack Against Subtopia, by Ian Nairn 12s. 6d.
Dartmoor: Building in the National Park, 5s. 0d.
The Design and Practice of Joinery, by John Eastwick-Field and John Stullman 42s. 0d.
The Design of Structural Members, Part 1, by H. T. Jackson, 25s. 0d.
Early Victorian Architecture in Britain, by Henry-Russell Hitchcock 7 gns. the set of 2 volumes.
Electrical Installations: a Handbook for Architects and Assistants, edited by Brian Grant 16s. 0d.
English Architecture at a Glance, by Frederick Chatterton, illustrated by J. D. M. Harvey 4s. 6d.
English Furniture at a Glance, written and illustrated by Barbara Jones 8s. 6d.
English History at a Glance, A Chart designed by H. A. Vetter 8s. 6d.
English Panorama, by Thomas Sharp 12s. 6d.
The Englishness of English Art, by Nikolaus Pevsner 16s. 0d.
Exhibition Design, edited by Misha Black 25s. 0d.
Fifty Modern Bungalows, edited by Felix Walter 18s. 6d.
Foundations for Houses and Other Small Structures, by W. H. Elgar 12s. 6d.
The Functional Tradition in Early Industrial Buildings, by J. M. Richards 36s. 0d.
The Future of Architecture, by Frank Lloyd Wright 50s. 0d.
Gardens in the Modern Landscape, by Christopher Tunnard 18s. 6d.
Gardens of Japan, by Tetsuro Yoshida 63s. 0d.
Heating and Air-Conditioning of Buildings, by Oscar Faber and J. R. Kell 65s. 0d.
High Victorian Design: A Study of the Exhibits of 1851, by Nikolaus Pevsner 12s. 6d.
A History of the English House, by Nathaniel Lloyd £3 13s. 6d.
The Home of Man, by Le Corbusier and François de Pierrefeu 15s. 0d.
House Conversion and Improvement, by Felix Walter 42s. 0d.

Indoor Plants and Gardens, by Margaret E. Jones and H. F. Clark: edited by Patience Gray, illustrated by Gordon Cullen 18s. 0d.
Inside the Pub, by Maurice Gorham and H. McG. Dunnett 18s. 0d.
Italy Builds, by G. E. Kidder Smith, with photographs by the author 56s. 0d.
The Japanese House and Garden, by Tetsuro Yoshida 60s. 0d.
The Landscape of Power, by Sylvia Crowe 16s. 0d.
London Night and Day: A Guide to Where the Other Books Don't Take You, by Osbert Lancaster and Sam Lambert 5s. 0d.
A Miniature History of the English House, by J. M. Richards 4s. 6d.
The Modern Architectural Model, by T. W. Hendrick, with a Foreword by Hugh Casson 16s. 0d.
Modern Architecture in Brazil, by Henrique E. Mindlin 84s. 0d.
Modern Architectural Design, by Sir Howard Robertson 25s. 0d.
The Modern Church, by Edward D. Mills 30s. 0d.
Modern Gardens, by Peter Shephard 36s. 0d.
The Modern Factory, by Edward D. Mills (New edition in preparation).
Modern Flats, by F. R. S. Yorke and Frederick Gibberd (in preparation) 60s. 0d.
The Modern House, by F. R. S. Yorke 50s. 0d.
The Modern Shop, by Bryan and Norman Westwood 30s. 0d.
New German Architecture, by Gerd Hatje, Hubert Hoffmann and Karl Kaspar 56s. 0d.
The New Small Garden, by Lady Allen of Hurtwood and Susan Jellicoe 15s. 0d.
The New Small House, edited by F. R. S. Yorke and Penelope Whiting 25s. 0d.
New Ways of Building, edited by Eric de Maré edition 45s. 0d.
New Ways of Servicing Buildings, edited by Eric de Maré 30s. 0d.
Outrage, by Ian Nairn 12s. 6d. The book about 'Subtopia.'
Parliament House: The Chambers of the House of Commons, by Maurice Hastings 12s. 6d.
The Planning and Equipment of Public Houses, by F. W. B. Yorke 21s. 0d.
Plastics in Building, by Joseph B. Singer 18s. 0d.
A Pocket Guide to Modern Buildings in London, by Ian McCallum 3s. 6d.
The Principles of Architectural Composition, by Sir Howard Robertson 15s. 0d.
The Railway Station, by Carroll L. V. Meeks 60s. 0d.
School Design and Construction, by J. A. Godfrey and R. Castle Cleary 36s. 0d.
Site Supervision, by A. A. Macfarlane 16s. 0d.
Structure in Building, by W. Fisher Cassie and J. H. Napper 30s. 0d.
Sweden Builds, by G. E. Kidder Smith, with photographs by the author 56s. 0d.
Time on the Thames, written and illustrated by Eric de Maré 9s. 6d.
Tomorrow's Landscape, by Sylvia Crowe 21s. 0d.
Towards a New Architecture, by Le Corbusier, translated by Frederick Etchells 18s. 0d.
Town Design, by Frederick Gibberd (New edition in preparation)
The Unsophisticated Arts, written and illustrated by Barbara Jones 25s. 0d.
The Works of Pier Luigi Nervi, 56s. 0d.

A complete illustrated catalogue will be sent free on application:

The Architectural Press

9-13 Queen Anne's Gate Westminster SW1



Meshing

When all parts are in mesh

the job runs sweetly

and quickly.

When Banister, Walton are responsible

for the steel framework

every activity is in mesh.

The result—economy

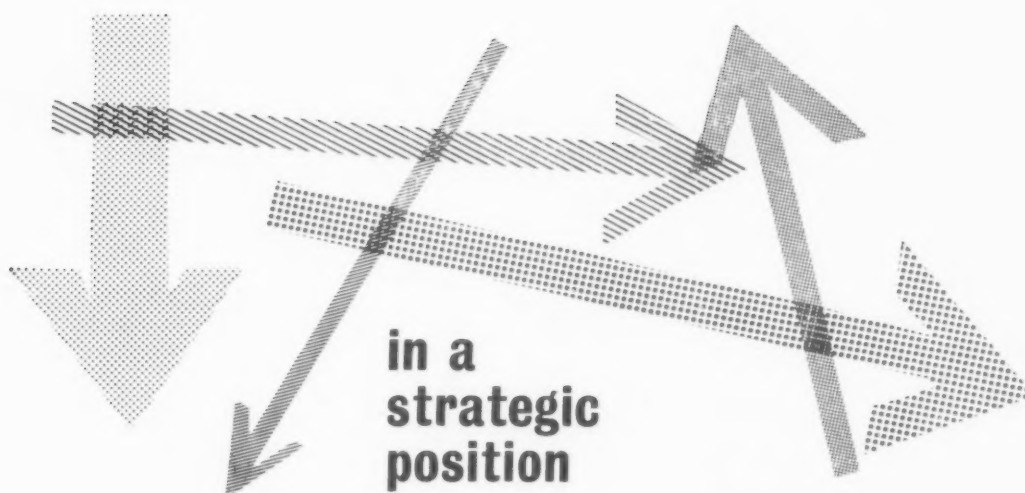
in time and in cost.

★ *The immediate availability of ample steel stocks ensures speedy completion.*

MCN 3355

Banister, Walton build in steel

Banister, Walton & Co. Ltd • Structural Steel Engineers and Stockholders • MANCHESTER • LONDON • BIRMINGHAM

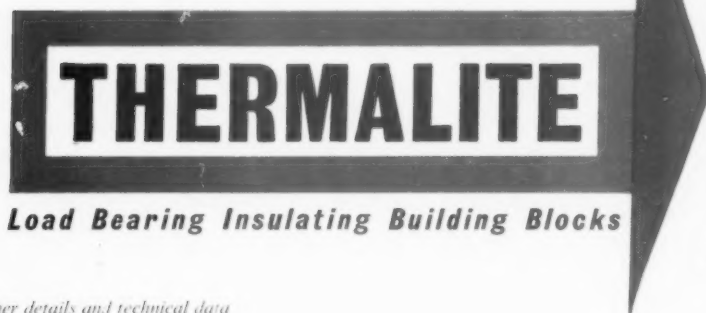


the second **THERMALITE** factory is now completed and in production

Its capacity will greatly supplement the already large output of Thermalite Insulating Building Blocks.

The Sutton Coldfield, Warwickshire, location was chosen to ensure adequate supplies and reduce haulage to the Midlands and Northern areas.

Thermalite is the unique load bearing building block having outstanding thermal insulating properties. Light in weight, it is easy to handle, quick to erect and provides exceptional resistance to fire.



Load Bearing Insulating Building Blocks

Thermal insulation

Load bearing

High speed of laying

Light weight

Workability

Direct fixing

Fire resistance

Reduces the risk of condensation.

For further details and technical data apply to

THERMALITE-YTONG LIMITED,
Hams Hall, Lea Marston, Sutton Coldfield, Warwickshire.
Telephone: Coleshill 2081.